Annex 4

OXFORDSHIRE MINERALS AND WASTE LOCAL PLAN

PART 1 – CORE STRATEGY

PROPOSED SUBMISSION DOCUMENT

Draft for County Council
24 March 2015

1. INTRODUCTION

Introduction

1.1 The County Council is responsible for minerals and waste planning in Oxfordshire and has reviewed the planning policies for mineral working and waste management. The new Oxfordshire Minerals and Waste Local Plan will comprise the following documents: Part 1 – Core Strategy (this document); and Part 2 – Site Allocations.

1.2 Closely related to the Plan, the Council has also prepared the Oxfordshire Statement of Community Involvement, which was adopted in 2006. This has now been reviewed and a revised Statement of Community Involvement was adopted by the County Council on 24 March 2015.

1.3 The Minerals and Waste Local Plan: Part 1 – Core Strategy provides the planning strategies and policies for the development that will be needed for the supply of minerals and management of waste in Oxfordshire over the period to 2031. It sets out policies to guide minerals and waste development over the plan period and common core policies which address development management issues relevant to both minerals and waste.

1.4 The Minerals and Waste Local Plan: Part 2 – Site Allocations Document (hereafter called the Site Allocations Document) will allocate specific sites for minerals and waste developments within the policy parameters set by the Core Strategy, to provide for the development needs established in the Core Strategy for the period to 2031. It will also include any further development management policies that are necessary in relation to the allocated sites. The Site Allocations Document will be prepared after the Core Strategy.

1.5 Legislation and national planning policy and guidance allows for a separate Core Strategy and Site Allocations Document to be prepared, rather than a single local plan document, where there is a clear justification for doing so. Preparation of separate development plan documents has been progressing since 2006, in accordance with previous legislation and national planning policy. Work has been focussed on the Core Strategy, leaving the Site Allocations Documents to follow. Changing now to a single plan document would add one to two years to the plan preparation process, due largely to the need to identify, assess and consult on site options.

1.6 In view of the age and outdated nature of the Oxfordshire Minerals and Waste Local Plan (adopted July 1996) and the significant delay in the adoption of a new Plan (the Core Strategy) with up to date polices that would result from changing to a single plan, there is a clear justification for continuing with the preparation of separate Core Strategy and Site Allocations Documents.

Replacement of existing development plan policies

1.7 The policies in the Core Strategy will, when it is adopted, replace policies in the Oxfordshire Minerals and Waste Local Plan (1996). Appendix 1 sets out a

schedule of existing saved development plan polices that are replaced by polices in the Core Strategy. It also lists existing saved development plan polices that will be replace by polices in the Site Allocations Document.

Proposed submission document

1.7 This document is the Council's Minerals and Waste Local Plan: Part 1 – Core Strategy Proposed Submission Document, which is to be submitted to the Government for independent examination. The Council believes that the document as published is sound and provides the most appropriate strategies and policies to meet the minerals and waste development needs of the County.

1.8 This document is supported by a Sustainability Appraisal and Strategic Environmental Assessment, Habitats Regulation Assessment and Strategic Flood Risk Assessment. A Local Aggregate Assessment, a Waste Needs Assessment and a series of Topic Papers also provide background information on key issues and the development of the strategies and policies. These supporting documents, and all other documents that make up the evidence base for the plan, are available on the Council's website.

Representations on the proposed submission document

1.9 Before submitting this Core Strategy to the Government for examination, the Council is publishing it to allow for representations to be made. The period for making representations is at least 6 weeks from publication.

1.10 The period and procedure for making representations is set out in the statement of the representations procedure published alongside this plan.

1.11 A form is provided for making representations, which respondents are encouraged to use in order that all necessary information is provided. This asks for details of the section of the document to which the representation relates, and how the representation relates to tests of soundness and legal compliance. Guidance on these tests is provided.

1.12 This Core Strategy Proposed Submission Document, together with all related and supporting documents, is available for viewing and downloading on the County Council website at: http://www.oxfordshire.gov.uk/cms/public-site/minerals-and-waste-policy

1.13 The Core Strategy and information on how to make representations is also available in Oxfordshire libraries and District Council offices, and the County Council offices at County Hall and Speedwell House in Oxford.

What happens next?

1.14 The Council will review the representations received to ensure that the tests of soundness and legal compliance have been met. Subject to no further changes being required, the Core Strategy Proposed Submission Document

and the representations received on it will be submitted to the Government. A Government appointed Inspector will carry out an independent examination of the Core Strategy, which is expected to take place in late 2015. The County Council hopes to adopt the Core Strategy early in 2016. The programme for preparing the plan is set out in more detail in the Minerals and Waste Development Scheme[1].

[1] The Oxfordshire Minerals and Waste Development Scheme (Sixth Revision) 2014 came into effect on 08 December 2014 and is available on the County Council website.

2. BACKGROUND

This section requires further editing and factual updating

The Oxfordshire area

2.1 Oxfordshire is renowned for its knowledge-based economy and research and development facilities. It is also the most rural county in the South East of England. It has seven Special Areas of Conservation, protected by European legislation; numerous Sites of Special Scientific Interest and other sites of importance for biodiversity and geodiversity; a rich variety of landscapes, with almost a quarter of the land area within an Area of Outstanding Natural Beauty; numerous historic buildings; extensive archaeological assets; and areas of high grade agricultural land, including where sand and gravel is located along the River Thames and its tributaries. An area around Oxford is Green Belt. Figure 1 shows the main protected areas in the county.

2.2 The population of Oxfordshire is currently approximately 666,000. Over the plan period, significant population growth, new housing, commercial and related development, investment in infrastructure and related traffic growth are expected[2]. This has implications for the demand for and supply of minerals and also for the production of waste and how it is dealt with. Oxfordshire has to balance the need to protect and enhance its special environment, both urban and rural, with the needs for economic growth and housing.

2.3 The growth of Oxfordshire's knowledge-based economy is linked to and supported by the maintenance and enhancement of its high quality environment. This encourages businesses to choose to locate in the county. A well-functioning natural environment delivers many ecosystem services, which are essential functions that nature gives to people, such as flood mitigation, good water quality, carbon storage, pollinators for crops and leisure opportunities.

2.4 Around 100,000 additional homes could be built in Oxfordshire between 2011 and 2031.[3] There is a need for considerable investment in new infrastructure to support the objective for Oxfordshire of supporting a thriving economy and to meet the pressures on essential services such as schools, transport and other community facilities. Key challenges for the plan are to make provision for the construction materials that will be needed to be supplied and for the waste that will be produced to be dealt with in ways that are effective and sustainable. There is also a need to ensure that new developments reduce carbon emissions and are resilient to climate change.

2.5 Key locations for development, as shown on figure 2, are:

- Didcot and Wantage & Grove which are within the Science Vale UK area, which also includes Milton Park, Harwell Science and Innovation Campus

[2] Oxfordshire's population is forecast to grow by a further 12% over the period to 2026, to approximately 748,000. Road traffic has grown rapidly in Oxfordshire, particularly on the M40 and A34, and congestion is a significant problem; and growth in all traffic on Oxfordshire roads is predicted to be over 25% over the period to 2026.

[3] Oxfordshire Strategic Housing Market Assessment, GL Hearn (2014), identifies that between 93,560 and 106,560 additional homes are needed in Oxfordshire over the period 2011 – 2031.

and Culham Science Centre, where there are plans for around 20,000 new homes and 20,000 new jobs;

- Bicester, where further major housing and employment growth is planned, including the North west Bicester Eco-town which will deliver up to 6,000 new homes, and for which a masterplan will provide a long-term vision and framework for integrating growth of the town; and
- Oxford, which remains a world class centre of education, research and innovation.

2.6 Large housing developments (1000+ homes) are also proposed at Banbury, Upper Heyford, Witney and Carterton. Just over half of planned growth in Oxfordshire is in the southern part of the county, with the remainder in the northern part.

Figure 1: Special Areas of Conservation, Sites of Special Scientific Interest, Areas of Outstanding Natural Beauty and Green Belt in Oxfordshire

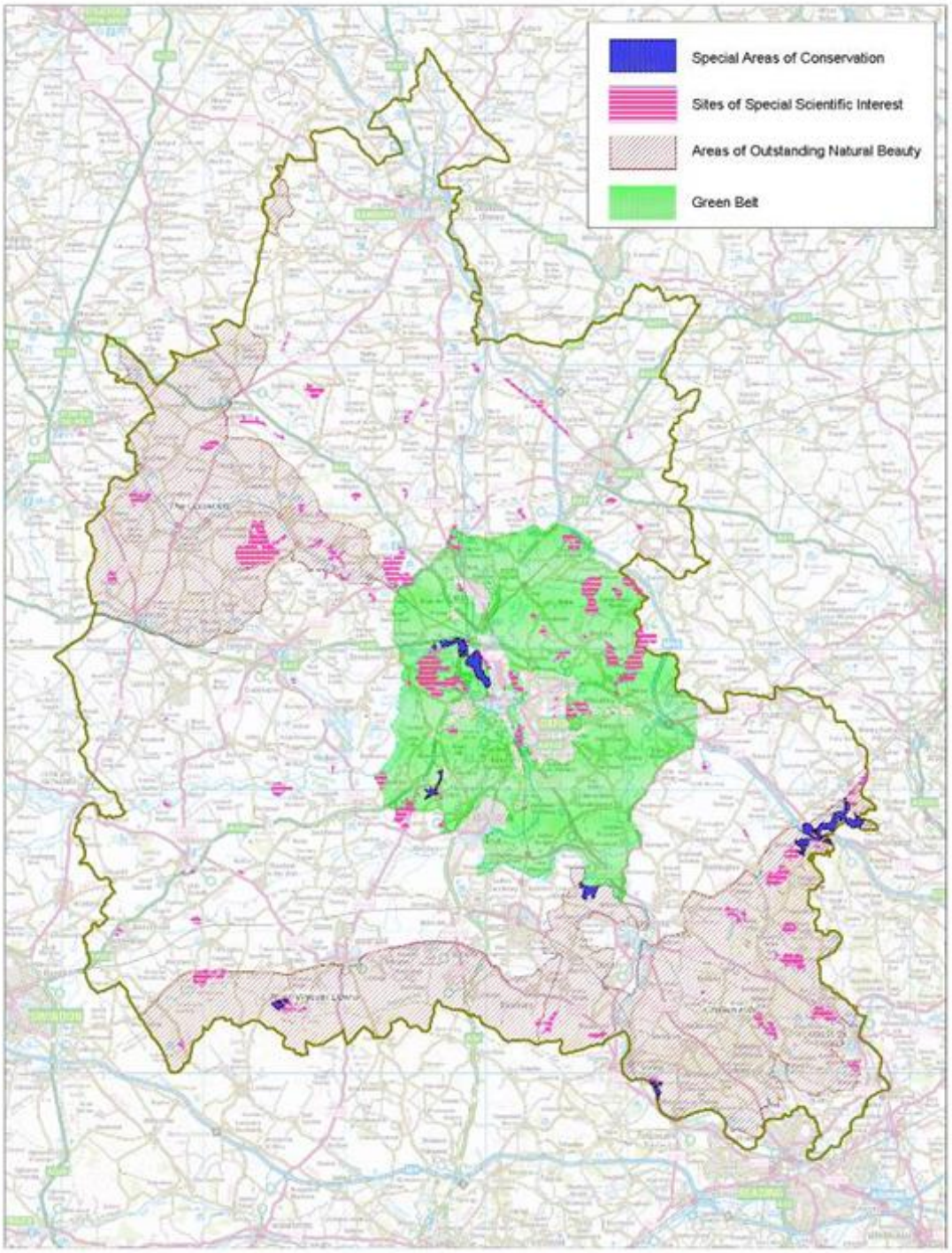

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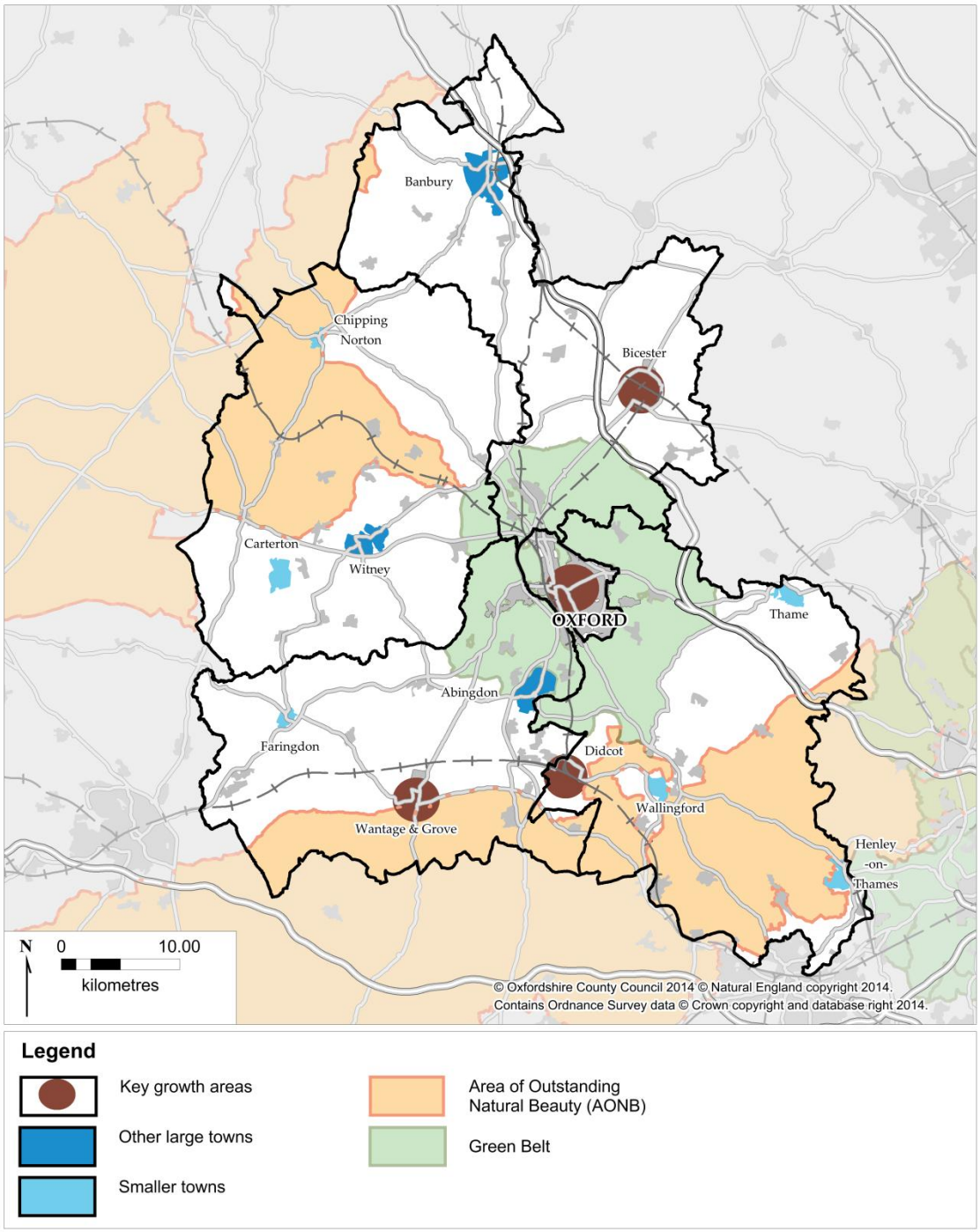
Figure 2: Oxfordshire growth areas, other large towns and smaller towns
Labels to be added on map for Upper Heyford and Science Vale



Minerals in Oxfordshire

2.7 Sand and gravel is the most common mineral resource in Oxfordshire and this is typically found in river valley deposits, particularly along the River Thames and its tributaries the Windrush, Evenlode and Thame. Its primary use is to make concrete. Soft sand occurs mainly in the south west of the county; it is used in mortar and asphalt. Limestone and ironstone are found mainly in the north and west of the county; they are used primarily as crushed rock aggregate but also for building and walling stone. The resources include extensive areas of ironstone which received planning permission for mineral extraction in the 1950s, much of which is subject to environmental (Review Of Mineral Permissions (ROMP)) legislation which prevents further working until planning conditions that accord with up to date environmental standards have been agreed with the County Council. Figures 3a and 3b show the location of aggregate mineral resources; and figure 4 shows the location of active mineral workings and sites with planning permission for mineral working in the county.

2.8 Annual production of aggregates (sand and gravel and crushed rock) in Oxfordshire has fallen over the ten year period 2004 to 2013 from two million tonnes to just over one million tonnes[4]. A survey in 2009 found that 78% of sand and gravel and 51% of crushed rock produced in the county is used in Oxfordshire. The issue of how much should be provided for in future is covered in section 4.

2.9 There are movements of minerals both into and out of the county. The 2009 survey showed that Oxfordshire imported more sand and gravel and crushed rock than it exported. Hard rock aggregates are imported by rail, from the Mendips and Leicestershire, and road to meet construction needs which cannot be met by local, softer limestone and ironstone.

2.10 Production of aggregates from recycled construction and demolition waste and from secondary materials (including ash from Didcot A Power Station) is believed to have made an increasingly significant contribution to the overall requirement for aggregates. Didcot A power station closed in March 2013 but the Ardley energy recovery facility became operational in 2014, providing a new source of ash. Locations of secondary and recycled aggregate facilities are shown in figure 5.

[4] Oxfordshire County Council Local Aggregate Assessment 2014

Figure 3a: Sand and gravel resources in Oxfordshire

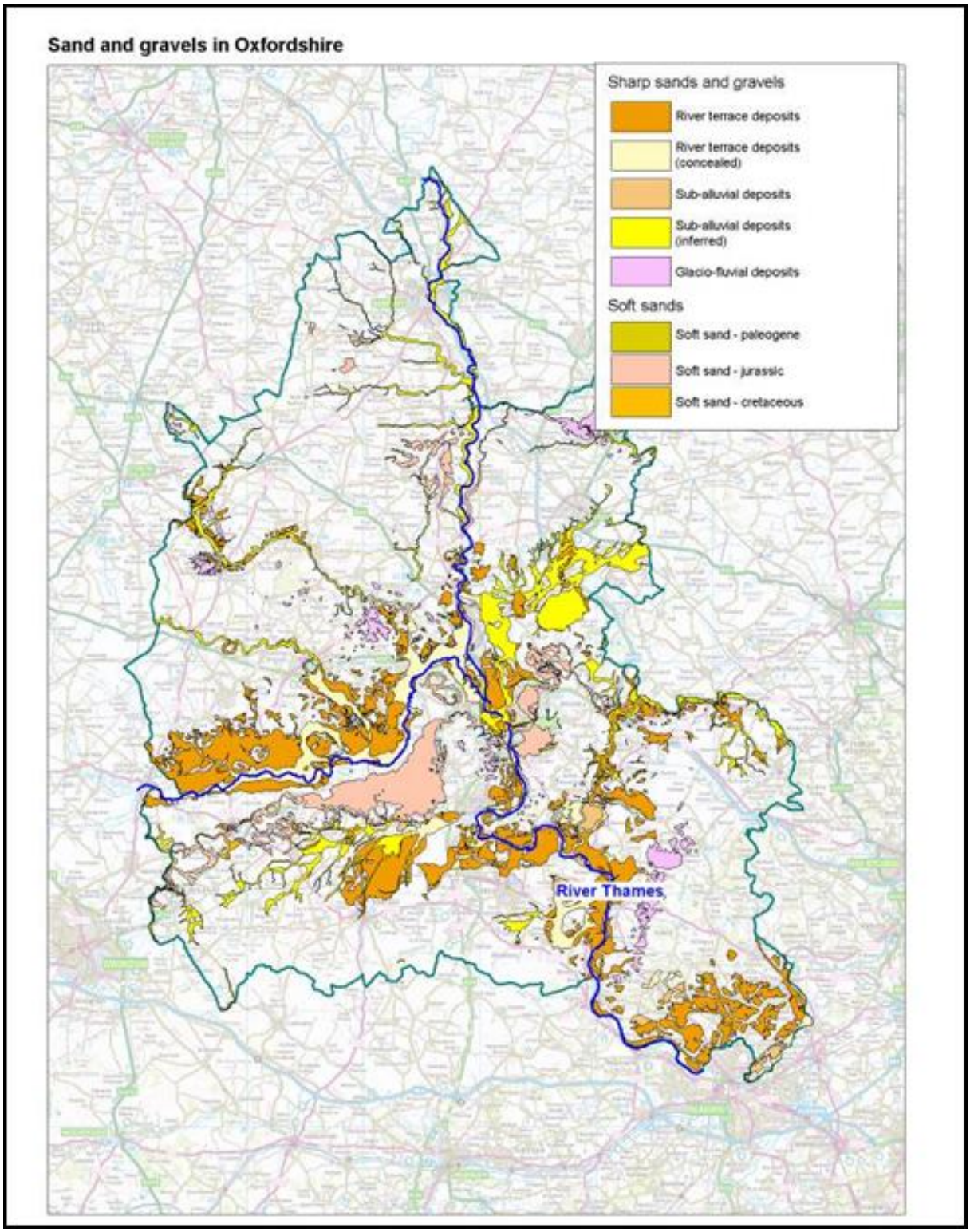


Figure 3b: Crushed rock resources in Oxfordshire

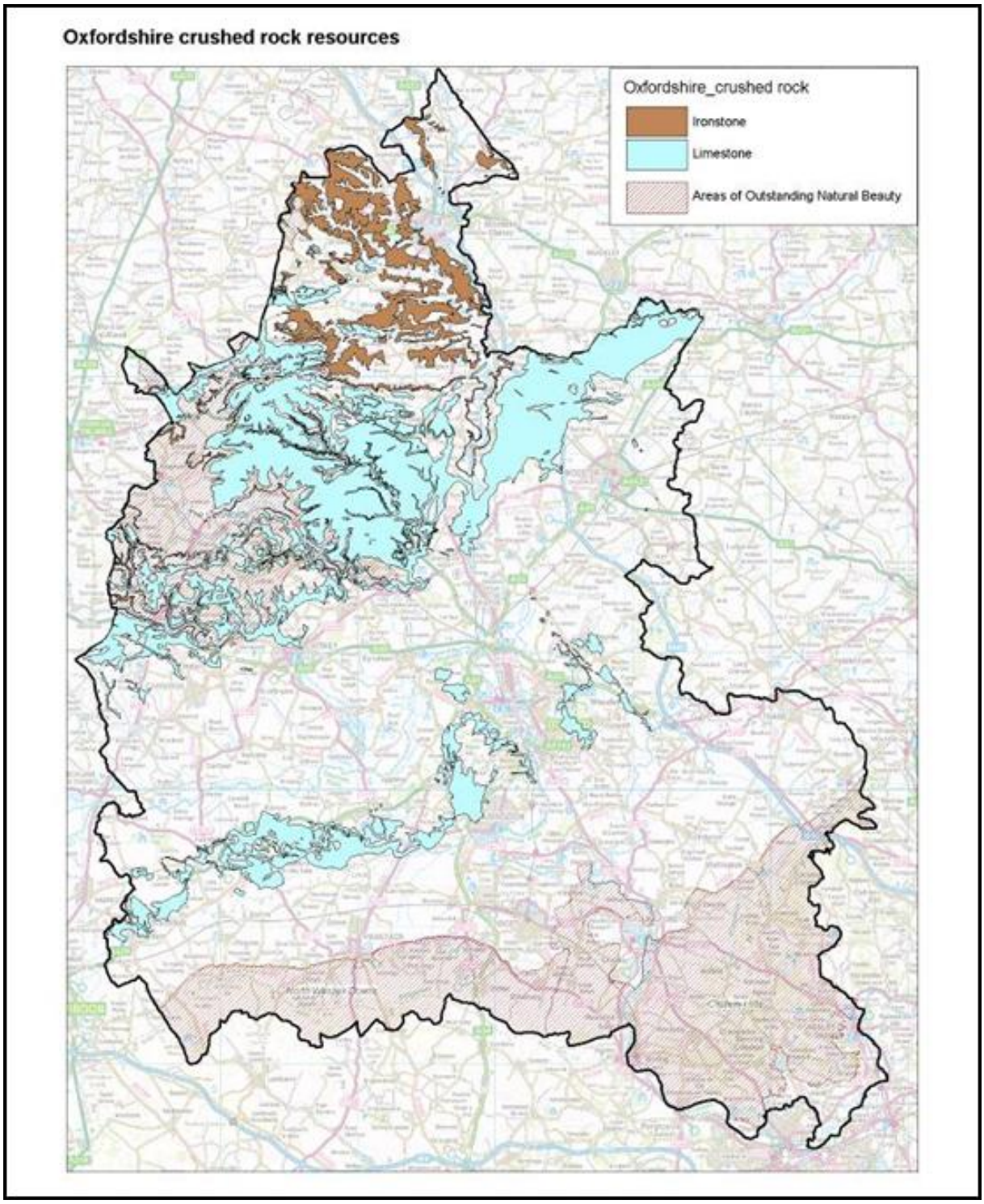


Figure 4: Location of active mineral workings and sites with planning permission.
To be updated

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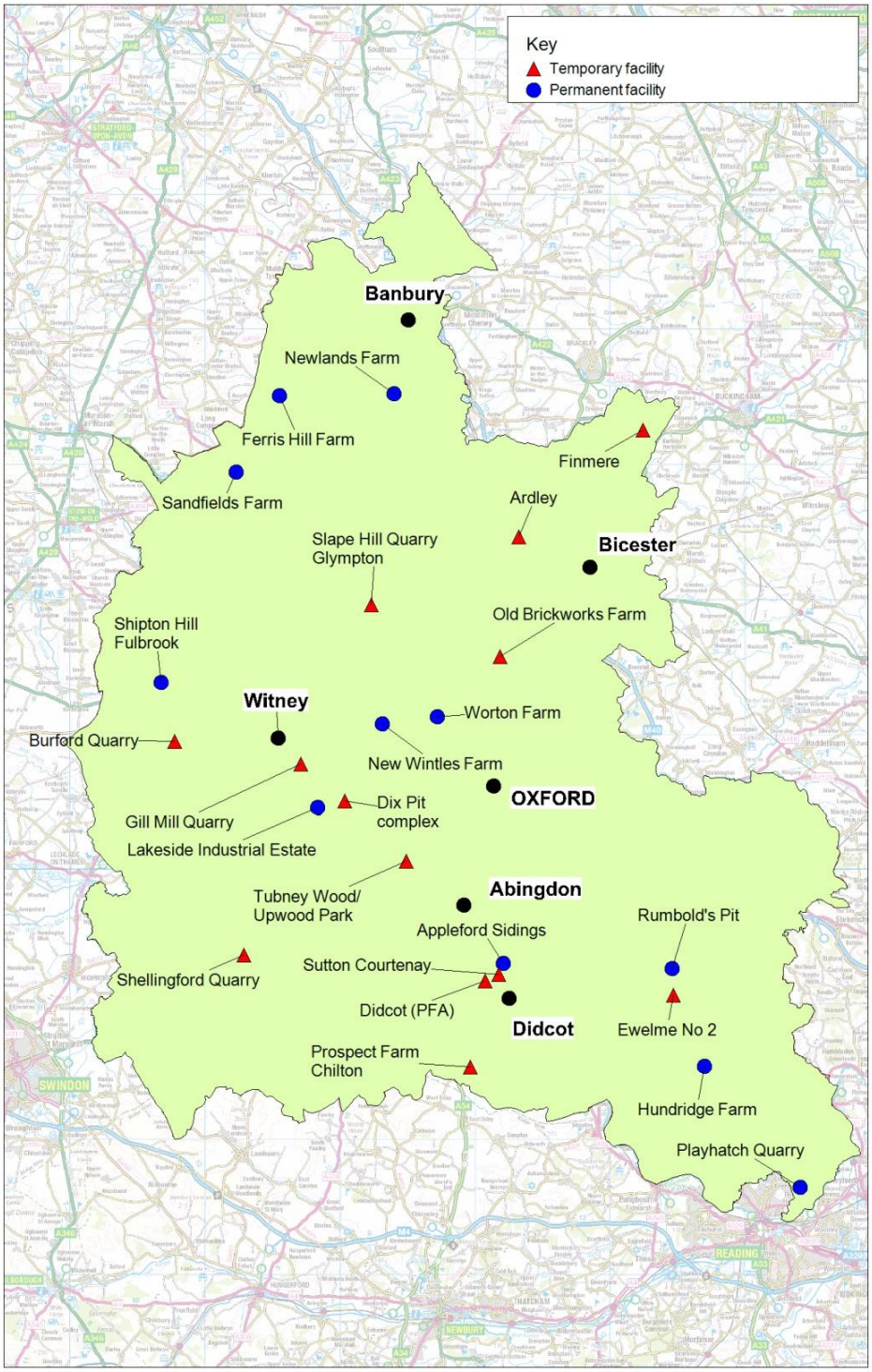
Figure 5: Location of recycled and secondary aggregate facilities with planning permission

To be updated



Waste in Oxfordshire

2.11 Over two million tonnes of waste[5] (excluding agricultural waste) are currently produced annually by Oxfordshire residents, businesses and organisations, mostly comprising:

- Municipal solid waste (mainly household) waste (collected, processed and disposed of by the district and county councils) – approximately 15%;
- Commercial and industrial waste (produced, processed and disposed of by the private sector) – approximately 35%;
- Construction, demolition and excavation waste (produced, processed and disposed of by the private sector) – approximately 50%.

2.12 Agricultural waste, and also mineral waste, are also produced in significant quantity, but much of this is managed on site. Other wastes that need to be provided for are produced in smaller quantities. These are hazardous wastes (including oils and solvents, chemicals and asbestos); radioactive waste; and sewage sludge.

2.13 About 90% of Oxfordshire's waste is dealt with in the county[6]. The main method of dealing with waste has been by disposal at local landfill sites, but waste is now increasingly being diverted from landfill by recycling and treatment. Existing waste facilities and sites with planning permission are shown on figure 6 (municipal and commercial & industrial waste) and figure 7 (construction, demolition and excavation waste).

2.14 Oxfordshire is a net importer of waste. Some waste is brought into the county from elsewhere for disposal at landfill sites, under commercial arrangements that are largely outside current planning controls. In particular, waste comes into Oxfordshire from London (much of it by rail) and Berkshire. The amount imported has fallen in recent years. In 2013 approximately 425,000 tonnes of waste from other areas was disposed in Oxfordshire landfills, as shown in Table 1, half of which was inert waste from construction and demolition projects. Sutton Courtenay is the largest receiving landfill site.

Table 1: Waste disposed in Oxfordshire from other areas 2008 – 2013 (tonnes)

Area	2008	2009	2010	2011	2012	2013
Berkshire	218,473	185,139	149,418	108,173	91,751	126,351
London	254,457	307,520	580,236	456,312	185,797	178,353
Rest of UK	67,628	64,497	65,655	120,965	109,477	118,926
Total	540,558	557,156	795,309	685,450	386,955	423,630

[5] Oxfordshire Waste Needs Assessment 2015 and Report for Oxfordshire County Council by BPP Consulting 2014.
[6] Oxfordshire Waste Needs Assessment 2015.

Figure 6: Location of municipal and commercial & industrial waste facilities and sites with planning permission

To be updated

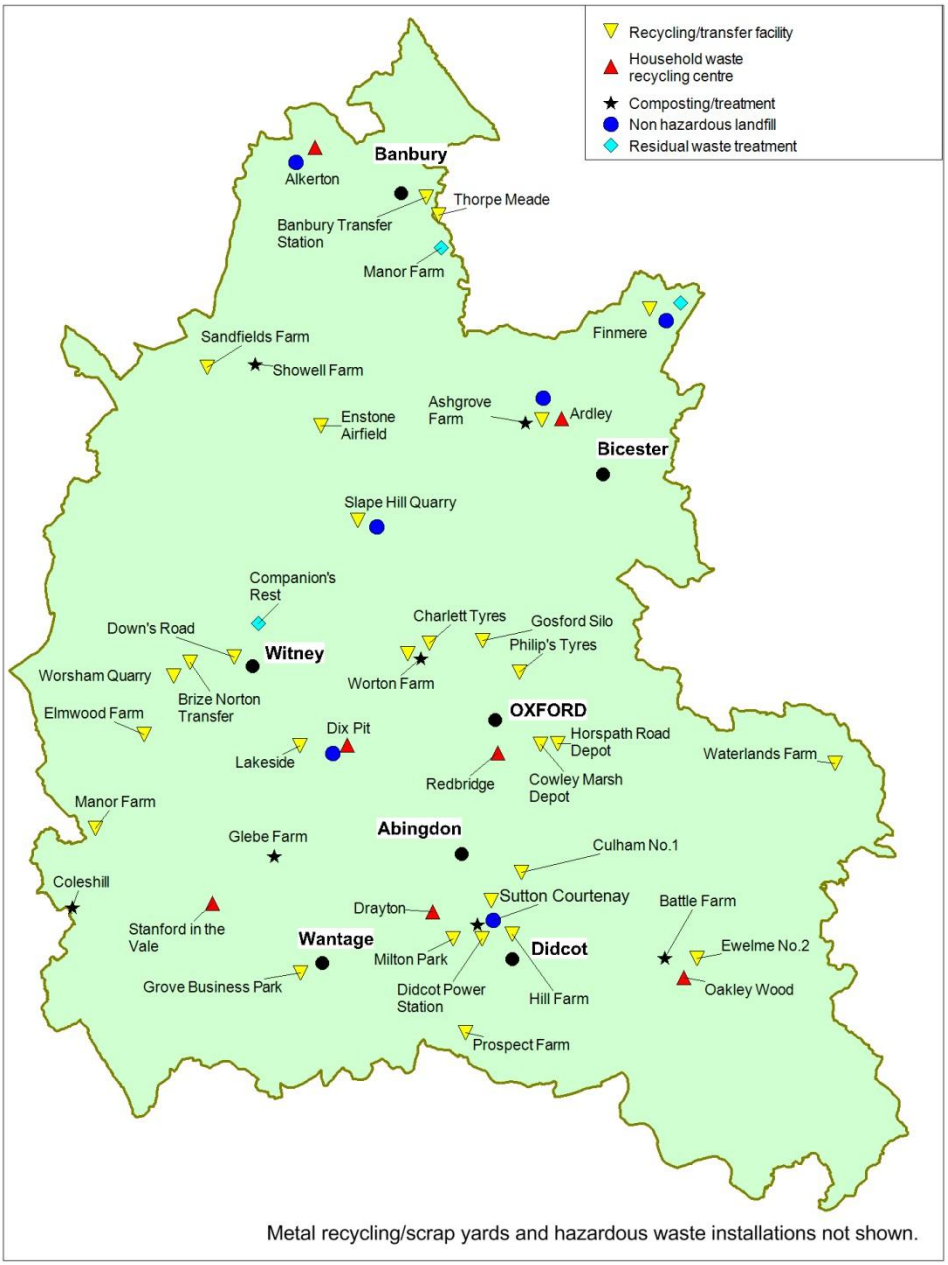
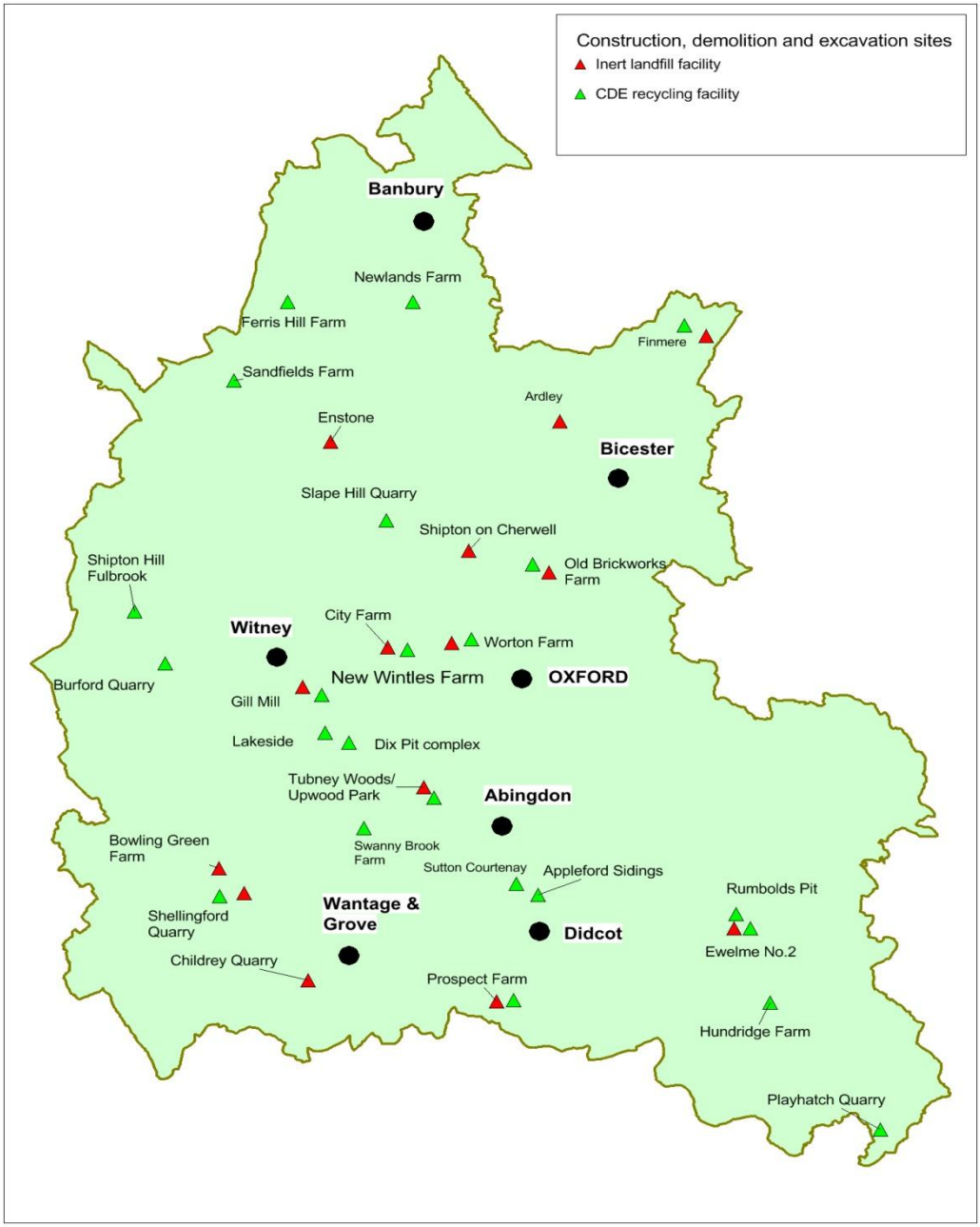


Figure 7: Location of permanent construction, demolition & excavation waste facilities and sites with planning permission *To be updated*



Policy context

2.15 The draft plan reflects international, national and local policies and plans (regional plans are no longer relevant[7]). Broad areas of policy are outlined below; more specific aspects of planning policy are covered later in the document or in the relevant Topic Paper.

International/European

2.16 The key international plans and programmes which are relevant to the draft minerals and waste plan are:

- The World Summit on Sustainable Development, Johannesburg (2002);
- Kyoto Protocol and the UN framework convention on climate change (1997);
- Bern Convention on the conservation of European wildlife and natural habitats.

2.17 The European Union has issued a number of Directives which have been transposed into national legislation and policy and are of particular relevance to this plan. These include the Waste Framework Directive[8] and the Landfill Directive[9]. Other relevant Directives include the Habitats Directive[10] , the Strategic Environmental Assessment Directive[11] and the Water Framework Directive[12].

National

2.18 The Minerals and Waste Local Plan – Core Strategy is being prepared under the Planning and Compulsory Purchase Act 2004 and the Localism Act 2011. The Localism Act 2011 introduced a specific requirement (the Duty to Cooperate) that local authorities preparing Local Plans engage 'constructively, actively and on an on-going basis' on strategic issues having cross-boundary significance with other authorities and agencies.

2.19 In 2012 the Government replaced the former national planning policy statements with a briefer single document, the National Planning Policy Framework (NPPF). The NPPF does not contain specific policy on waste planning; this is separately contained in National Planning Policy for Waste (October 2014). The detailed practice guidance notes that previously supported the former planning policy statements have been replaced by the

[7] The Regional Spatial Strategy for the South East (the South East Plan) was revoked in March 2013.
[8] Directive on Waste (2008/98/EC) (transposed into English law under the Waste (England and Wales) Regulations 2011).
[9] Directive on the Landfill of Waste (99/31/EC) (transposed into English law under the Landfill (England & Wales) Regulations 2002.
[10] The Conservation of Natural Habitats and Wild Flora and Fauna Directive (92/43/EC) (transposed into UK law under the Conservation of Habitats Species Regulations 2010).
[11] Directive on the Assessment of the Effects of Certain Plans and Programmes on the Environment (2001/42/EC) (transposed into UK law under the Environmental Assessment of Plans and Programmes Regulations 2004).
[12] Directive 2000/60/EC: establishing a framework for Community action in the field of water policy.

briefer on-line National Planning Practice Guidance which was introduced from March 2014. Other key publications include UK Post 2010 Biodiversity Framework, 2012 and UK Government Sustainable Development Strategy, March 2005.

2.20 The NPPF includes a presumption in favour of sustainable development, with local planning authorities expected to 'positively seek opportunities to meet the development needs of their area'. Sustainable development is expected to:

- Contribute to building a strong, responsive and competitive economy;
- Support strong, vibrant and healthy communities;
- Contribute to protecting and enhancing the natural, built and historic environment.

2.21 The NPPF recognises minerals as being 'essential to support sustainable economic growth and our quality of life'; and that there needs therefore to be 'a sufficient supply of material to provide the infrastructure, buildings, energy and goods that the country needs'[13]. Mineral planning authorities are to plan for 'a steady and adequate supply of aggregates' and industrial minerals. The NPPF also includes policy for on-shore oil and gas development, including unconventional hydrocarbons.

2.22 The Government published a new national Waste Management Plan for England in December 2013. This sets out the Government's ambition to work towards a more sustainable and efficient approach to resource use and management. It is a high level document which provides an analysis of the current waste management situation in England and evaluates how it will support implementation of the objectives and provisions of the Waste Framework Directive. It sets out the policies that are in place to help move towards a zero waste economy as part of the transition to a sustainable economy.

2.23 The National Planning Policy for Waste was published in October 2014, replacing Planning Policy Statement 10 'Planning for Sustainable Waste Management', March 2011It sets out the role that planning plays in delivering the country's waste ambitions, including through:

- Delivering sustainable development and resource efficiency by driving waste management up the waste hierarchy;
- Ensuring waste management is considered alongside other spatial planning concerns;
- Providing a framework in which communities and businesses take more responsibility for their own waste, including enabling waste to be disposed or recovered in line with the proximity principle; and
- Helping to secure re-use, recovery or disposal of waste without endangering human health or harming the environment.

2.24 The waste hierarchy is a key part of European policy in the Waste Framework Directive, and of national policy for the management of waste. In this

[13] National Planning Policy Framework, paragraph 142.

hierarchy, waste prevention is the most desirable option and disposal is the option of last resort.

Figure 8: Waste Hierarchy

2.25 By moving the management of waste up this hierarchy, away from disposal to reuse, recycling, composting and treatment to recover resources, the Government aims to achieve more sustainable waste management and to break the link between economic growth and the environmental impact of waste. This aim is shared by the County Council.

2.26 Landfilling biodegradable waste produces methane gas which is a powerful greenhouse gas. European and national legislation and policy has put in place strong financial and policy drivers and challenging targets to reduce the amount of biodegradable waste that is sent to landfill, and to increase the recovery of resources from waste. Landfill tax (which applies to all wastes and has been increasing year on year) has been and continues to increase the costs of landfill so that it will no longer be the cheapest means of dealing with waste.

2.27 The Government therefore expects waste planning authorities to prepare plans which identify sufficient opportunities to meet the identified needs of their area for the management of waste In doing so, they should work collaboratively with other authorities to provide a suitable network of facilities to deliver sustainable waste management, including taking into account waste arising in other waste planning authority areas.

2.28 Communities and businesses are encouraged to take more responsibility for their own waste. This reflects the proximity principle which is set out in the European Waste Framework Directive. Article 16 of this Directive[14] requires the establishment of an integrated and adequate network of waste disposal and recovery facilities to enable waste to be disposed or recovered in one of the nearest appropriate installations, ensuring a high level of protection for the environment and public health .

[14] Directive on Waste (2008/98/EC)

Local

2.29 The Oxfordshire Minerals and Waste Local Plan 2006 was adopted by the County Council in July 1996. It contains detailed policies for the supply of minerals, the provision of waste management facilities and for the control of minerals and waste developments. Under the Planning and Compulsory Purchase Act 2004 many of the policies of this Plan have been 'saved[15]' and currently form part of the development plan for Oxfordshire pending their replacement by policies in the new Minerals and Waste Local Plan.

2.30 In October 2012 the County Council submitted an Oxfordshire Minerals and Waste Core Strategy to the Secretary of State for examination. This was intended to replace the 2006 Local Plan and had been the subject of widespread stakeholder engagement and public consultation[16]. The Inspector appointed to carry out the independent examination of the Core Strategy raised issues over the adequacy of the evidence base in relation to the recently published NPPF and its compliance with the new duty to co-operate. In view of this, the examination was suspended in February 2013 and in July 2013 the County Council resolved to withdraw that plan and to prepare a revised Oxfordshire Minerals and Waste Local Plan[17].

2.31 The Development Plan for Oxfordshire comprises the District Councils' adopted Local Plans, the adopted Minerals and Waste Local Plan and any adopted Neighbourhood Plans. Local plans prepared by the City and District Councils contain policies that are also relevant to minerals and waste planning. The current position with local plans in Oxfordshire is shown in the following table.

District Council	**Adopted Plan**
Cherwell	Local Plan (1996)* – saved policies**
Oxford City	Core Strategy (March 2011)
South Oxfordshire	Core Strategy (December 2012)
Vale of White Horse	Local Plan (July 2006) – saved policies**
West Oxfordshire	Local Plan (June 2006) – saved policies**

* Non-statutory Cherwell Local Plan 2011 also relevant to the determination of planning applications.
** Policies saved by Secretary of State in September 2007.

2.32 The Minerals and Waste Local Plan – Core Strategy must take into account and, as far as possible, should be consistent with the plans of other mineral and waste planning authorities which share strategic minerals or waste issues with Oxfordshire (including neighbouring authorities, those which export hard rock to Oxfordshire and those which receive hazardous or radioactive waste from Oxfordshire).

[15] Letter from Government Office for the South East (Housing and Planning Directorate) 25 September 2007.
[16] Work undertaken on and evidence gathered in the preparation of the previous Minerals and Waste Core Strategy, including the outcome of stakeholder engagement and responses to consultations, have been taken into account in the preparation of this draft Minerals and Waste Local Plan: Core Strategy.
[17] Report to the County Council meeting on 9 July 2013.

2.33 The County, City and District Councils have worked in partnership to produce a Sustainable Community Strategy for Oxfordshire – Oxfordshire 2030. This is a partnership plan for improving quality of life in Oxfordshire. It sets out a long-term vision for Oxfordshire's future: 'By 2030 we want Oxfordshire to be recognised for its economic success, outstanding environment and quality of life; to be a place where everyone can realise their potential, contribute to and benefit from economic prosperity and where people are actively involved in their local communities'.

2.34 The strategic objectives of Oxfordshire 2030 include:

- World class economy: To build on Oxfordshire's vibrant economy and make sure that everyone has an opportunity to be included in that success.
- Healthy and thriving communities: To tackle lack of housing and respond effectively to the demographic challenges we face over the next 20 years.
- Environment and climate change: To respond to the challenges of climate change by minimising the effects of flooding, looking after our environment, reducing waste and use of energy to improve the quality of life for all.

Separate Community Strategies for the City and District Councils take their lead from these principles.

2.35 The Oxfordshire Local Enterprise Partnership is responsible for championing and developing the Oxfordshire economy and was launched by the Business Minister in March 2011. It aims to make Oxfordshire a globally competitive, knowledge based, economy open for business and at the heart of UK-wide economic growth, innovation and private sector job creation. The Business Plan for Growth 2013 looks to focus on three key spatial priorities:

- Science Vale UK: build on its existing research infrastructure and the designation of Harwell as the home of the national Satellite Applications 'Catapult';
- Bicester: where improved infrastructure and increased land availability is unlocking the potential for significant increases in employment growth;
- Oxford: continue to invest in developing the critical infrastructure necessary to realise the full potential of its world-class education, research and innovation.

2.36 The Oxfordshire Local Enterprise Partnership Strategic Economic Plan was published in March 2014 and is closely related to the Oxfordshire and Oxford City Deal that was agreed in January 2014 between the Government, the County and District Councils, the LEP and the two Universities. In January 2015 the LEP secured the Oxfordshire Growth Deal with the Government.

2.37 The County Council is both the planning authority for waste development; and the waste disposal authority, with responsibility for the management and disposal of municipal waste, mainly comprising the household waste and some commercial waste collected by the five district councils.

2.38 The County and District Councils work together on municipal waste management. The Oxfordshire Joint Municipal Waste Management Strategy 2013 has been adopted by the six Councils and replaces the previous strategy 'No Time to Waste' that was agreed in 2007. The new strategy provides a framework and policies for the management of municipal waste in the county to 2030. The vision for the future is: 'A society where everyone tries to prevent waste and sees waste materials as a potential resource'.

2.39 The Joint Municipal Waste Management Strategy includes policies:

- to ensure Zero growth or better of municipal waste per person per annum;
- to recycle or compost at least 65% of household waste by 2020 and at least 70% by 2025;
- to minimise waste to landfill and recover energy from non-recyclable waste and seek to landfill no more than 5% of non-recyclable household waste; and
- to work with the Waste Planning Authority to ensure that waste facilities are suitably sized and distributed with the aim of minimising the transport of waste

The strategy document is supported by a Waste Prevention Strategy 2010–2020.

2.40 The Minerals and Waste Local Plan – Core Strategy is separate from the Joint Municipal Waste Management Strategy but should be informed by and consistent with its provisions.

Issues

2.41 The plan needs to make provision for mineral working and supply to meet the needs for Oxfordshire's planned growth and development that is likely to take place over the next 20 years and to maintain the existing built fabric of the county. It also needs to make provision for waste management facilities to meet the needs of the current population and businesses of Oxfordshire and the planned growth and development.

2.42 Much of the work that was undertaken in preparing the Minerals and Waste Core Strategy (see paragraph 2.29) is still relevant to the preparation of this new plan. The Topic Papers that support the Minerals and Waste Local Plan – Core Strategy make reference to this previous work where relevant. Many of the issues that need to be addressed by this plan were previously identified in the preparation of and consultation on the former Core Strategy.

<u>Minerals</u>

2.43 National policy[18] recognises that minerals are a finite natural resource and can only be worked where they are found. Most mineral workings are located in rural areas, many of which are served by minor roads. In some cases lorries carrying aggregates have to pass through small villages and towns, contributing to congestion and impacting on local communities and the

[18] National Planning Policy Framework: paragraph 142.

environment. The River Thames cuts across the county and the movement of sand and gravel is constrained by the limited number of river crossings, many of which have weight restrictions. One particular consequence of this is that aggregates from sources in West Oxfordshire (e.g. the Lower Windrush Valley) have to be transported longer distances, crossing the river at Oxford, in order to reach markets in the southern part of the county. Some communities have experienced extensive working in the past, and in certain areas the local landscape has been significantly altered by the creation of lakes from sand and gravel workings.

2.44 Key issues for minerals planning in Oxfordshire that the Core Strategy needs to address are:

Strategic issues

- The provision that should be made for working primary aggregate minerals (sand and gravel, soft sand and crushed rock) in Oxfordshire to meet the needs of the county for construction materials through the plan period, taking into account the supply of aggregates that may be expected from mineral working in other areas and the contribution that should be made from mineral working in Oxfordshire towards the aggregate supply needs of other areas.

- The approach that should be taken to supply of aggregates from outside Oxfordshire, particularly by rail through aggregate railhead depots.

- The contribution towards meeting overall aggregate supply requirements in Oxfordshire that could be made by secondary and recycled aggregate and how that contribution could be best secured.

Other issues

- Where the mineral working that will be required in Oxfordshire over the plan period should be located, taking into account existing quarries and permitted working areas, the availability of potentially workable mineral resources and the distribution of demand for aggregate minerals across the county.

- How strategic locations for aggregate mineral working should be identified, the amount and types of new mineral working areas that will need to be provided for and the criteria that should be used to identify suitable sites for working.

- The provision that should be made for working non-aggregate minerals in Oxfordshire, including building stone and clay, and where any mineral working that is required should take place.

- The approach that should be taken and the criteria that should be applied in the consideration of proposals for minerals development.

- The approach that should be taken to the restoration and aftercare of mineral workings.

- Which mineral resources and minerals infrastructure in Oxfordshire should be safeguarded from sterilisation by other forms of development and how this should be done.

Waste

2.45 National policy[19] puts an emphasis on the need for new waste management facilities, to drive the management of waste up the waste hierarchy and divert waste from landfill. In Oxfordshire a number of new waste management facilities have already been developed across the county. Some existing sites are the subject of temporary planning permissions and further facilities are expected to be needed. Sites already in longer term waste management use are valuable but can be vulnerable to pressures for other forms of development.

2.46 The government expects communities to take more responsibility for their own waste, but it can be difficult to find suitable sites for waste management facilities within or close to centres of population. Consequently, many waste facilities are located in rural areas away from the built up areas where most waste is produced. In and around Oxford, the difficulties of finding appropriate sites are further accentuated by the need to consider the protection of the Green Belt.

2.47 Oxfordshire has a considerable amount of landfill space in comparison with most other counties, but increasingly less waste is being disposed in landfills as new waste treatment facilities become operational. The disposal of Oxfordshire's waste by landfill has been significantly reduced by the opening in 2014 of the new Ardley Energy Recovery Facility. The reduction in waste disposal by landfill may lead to proposals for the durations of landfill sites to be extended beyond what was originally intended, with the consequent continuation of any impacts on the local communities that host them; or it may lead to landfill sites being closed without being fully infilled, with restoration at lower levels.

2.48 Key issues for waste planning in Oxfordshire that the Core Strategy needs to address are:

Strategic issues

- The types and quantities of waste that are expected to be produced in Oxfordshire over the plan period.

- The extent to which provision can be made for this waste to be managed or disposed at facilities within Oxfordshire.

[19] National Planning Policy for Waste (October 2014)

- How and where waste produced in Oxfordshire that cannot be managed or disposed within the county is to be managed or disposed, including consideration of:
  - The types and quantities of waste involved;
  - The reasons why this waste cannot be managed or disposed in Oxfordshire;
  - Options for management or disposal of this waste outside Oxfordshire; and
  - Any barriers to the management or disposal of this waste outside Oxfordshire.

- The extent to which demand for waste produced outside Oxfordshire to be managed or disposed at facilities within the county should be met, including consideration of:
  - The types and quantities of waste involved;
  - The reasons why this waste cannot be managed or disposed in or closer to the area of waste arising;
  - Whether the waste could be managed at existing facilities or whether additional provision would be required;
  - Any barriers there might there be to managing or disposing of the waste.

Other issues

- How the waste that is to be managed or disposed in Oxfordshire should be so managed or disposed.

- The amount of waste management and disposal capacity that will be required to manage and dispose of this waste effectively.

- The extent to which this capacity requirement could be met by existing facilities, and the amount of additional waste management capacity that will be needed and the types of facilities that will be required.

- Where any new waste management or disposal facilities should be located, the types of sites that should be used and the criteria that should be used to identify suitable sites.
- The approach that should be taken and the criteria that should be applied in the consideration of proposals for waste development.

- The approach that should be taken to future landfill provision and how existing landfill facilities should be managed and restored.

- Which waste management facilities should be safeguarded from other forms of development and how this should be done.

Habitats Regulations Assessment

2.49 The Habitats Directive requires that planning authorities assess the likely effects of their plans, either alone or in combination with other plans and

projects, on sites which have been designated as being of European importance for the habitat or species they support. In Oxfordshire there are seven sites designated as Special Areas of Conservation (SAC). A Habitats Regulations Assessment screening report, prepared by the Council (to support the subsequently withdrawn Core Strategy), identifies the seven sites and the conservation objectives that apply to each and provides an assessment of the likely impacts on them.

2.50 The screening report suggested that there could potentially be an impact of mineral extraction near Oxford Meadows SAC and Cothill Fen SAC. Further work was commissioned to provide a hydrogeological assessment of mineral working in the Eynsham / Cassington / Yarnton sharp sand and gravel area and the soft sand area north and south of the A420, west of Abingdon (part of the Corallian Ridge between Oxford and Faringdon). The consultants' report forms an addendum to the screening report. The report concluded that, with certain safeguards, mineral extraction could take place if required in these areas without being likely to have an effect on the SACs.

2.51 The County Council considers that this Habitats Regulations Assessment screening report and addendum is adequate to support the consultation draft plan. The screening report will be reviewed in the light of relevant responses to the consultation in consultation with Natural England and, if necessary, a revised screening report will be prepared to support the pre-submission draft of the plan.

Sustainability Appraisal / Strategic Environmental Assessment

2.52 The Strategic Environmental Assessment Directive requires that an assessment is carried out of the likely impacts of the plan on a range of environmental criteria. Policies and proposals in development plan documents must also be subject to sustainability appraisal, which includes consideration of social and economic as well as environmental factors. A sustainability appraisal scoping report has been prepared and published following consultation with the Environment Agency, Natural England and English Heritage.

2.53 The Council commissioned consultants to carry out a sustainability appraisal incorporating a strategic environmental assessment of options to assess the potential impacts of minerals and waste development against a range of environmental, economic and social criteria and this has informed the preferred approach set out in this draft plan.

Strategic Flood Risk Assessment

2.54 Local Authorities are expected to prepare a Strategic Flood Risk Assessment to inform the development of strategies and policies in local plans[20]. A Strategic Flood Risk Assessment assesses the potential risk of flooding to and from development that may take place, and provides detailed mapping of

[20] National Planning Policy Framework: paragraph 100.

areas at risk of flooding from all potential sources and anticipates the potential impact of climate change. The Strategic Flood Risk Assessment provides the main source of data to apply sequential testing of development options with a view to ensuring that, as far as possible, development takes place in areas at least risk of flooding.

2.55 The Council commissioned consultants to carry out a Level 1 Strategic Flood Risk Assessment in October 2010 to inform preparation of the (subsequently withdrawn) Minerals and Waste Core Strategy. The data in that assessment remains relevant but a review of the Strategic Flood Risk Assessment is being undertaken to take into account new data on flooding and any other relevant changes in circumstances the previous document was prepared. The Level 1 Strategic Flood Risk Assessment does not identify a need for a Level 2 (more detailed) study of flood risk to be undertaken at this stage for any area where minerals or waste development is anticipated.

3. VISION AND OBJECTIVES FOR MINERALS AND WASTE IN OXFORDSHIRE

Introduction

3.1 The vision and objectives of the plan provide the basis for the development of the strategy, policies and proposals for minerals supply and waste management through the period to 2031. The objectives seek to address the issues identified in chapter 2 above, taking into account relevant national and local policies, in particular the need to support Oxfordshire's economy, protect its environment and help develop healthy and thriving communities[21].

Minerals Planning Vision

3.2 The growth that is planned for Oxfordshire presents major challenges for minerals planning, including that adequate supplies of the minerals needed for construction are made available when and where required and in the most sustainable way possible.

3.3 The vision for minerals planning in Oxfordshire in 2031 is that:

a) There will be a sufficient supply of aggregate materials available to meet the development needs of the county with a world class economy, and make an appropriate contribution to wider needs, provided from the following sources (in order of priority):
   - secondary and recycled aggregate materials (where practicable);
   - locally produced sharp sand and gravel, soft sand, limestone and ironstone; and
   - import of materials such as hard crushed rock that are not available locally.

b) Mineral workings and supply facilities will be located and managed to minimise:
   - the distance that aggregates need to be transported by road from source to market;
   - the use of unsuitable roads, particularly through settlements; and
   - other harmful impacts of mineral extraction, processing and transportation on Oxfordshire's communities and environment.

c) Restored mineral workings will enhance the quality of Oxfordshire's natural environment and the quality of life for Oxfordshire residents by:
   - delivering a net gain in biodiversity, and making a significant contribution to establishing a coherent and resilient ecological network, through the creation of priority habitats at a landscape scale;
   - enhancing the green infrastructure within the Oxfordshire, providing opportunity for access to the countryside and recreation activity; and

[21] Oxfordshire Sustainable Community Strategy Oxfordshire 2030.

- helping to reduce the risk of flooding and adding to flood storage capacity.

Minerals Planning Objectives

3.4 The Oxfordshire Minerals Planning Vision is supported by the following objectives which underpin the minerals strategy and policies in this plan:

i. Facilitate the efficient use of Oxfordshire's mineral resources by encouraging the maximum practical recovery of aggregate from secondary and recycled materials for use in place of primary aggregates.

ii. Make provision for a steady and adequate supply of sharp sand and gravel, soft sand and crushed rock over the plan period to meet the planned economic growth and social needs of Oxfordshire.

iii. Make an appropriate contribution to meeting wider needs for aggregate minerals, having regard to the strategic importance of Oxfordshire's mineral resources, particularly sand and gravel.

iv. Enable a continued local supply of limestone and ironstone for building and walling stone for the maintenance, repair and construction of locally distinctive buildings and structures, and of clay to meet local needs for engineering and restoration material.

v. Provide a framework for investment and development by mineral operators and landowners through a clear and deliverable spatial strategy which is sufficiently flexible to meet future needs and has regard to existing and planned infrastructure.

vi. Minimise the flood risk associated with minerals development and contribute to climate change mitigation and adaptation, including through restoration schemes which provide habitat creation as a mechanism for addressing climate change adaptation and additional flood storage capacity in the floodplain where possible.

vii. Minimise the transport impact of mineral development on local communities, the environment and climate change by minimising the distance minerals need to be transported by road and encouraging where possible the movement of aggregates by conveyor, pipeline, rail and on Oxfordshire's waterways.

viii. Protect Oxfordshire's communities and natural and historic environments (including important landscapes and ecological, geological and archaeological and other heritage assets) from the harmful impacts of mineral development (including traffic).

ix. Provide benefits to Oxfordshire's natural environment and local communities through the restoration and aftercare of mineral workings at the earliest opportunity, in particular by contributing to nature conservation, enhancing the

quality and extent of Conservation Target Areas, contributing to landscape character, improving access to the countryside, safeguarding local amenity, providing opportunities for local recreation and providing benefit to the local economy.

x. Implement a biodiversity-led restoration strategy that delivers a net gain in biodiversity, and contributes to establishing a coherent and resilient ecological network, through the landscape-scale creation of priority habitat.

xi. Safeguard important known resources of sharp sand and gravel, soft sand, crushed rock and fuller's earth to ensure that those resources are not needlessly sterilised and remain potentially available for future use and are considered in future development decisions.

xii. Safeguard important facilities for the production of secondary and recycled aggregate, railhead sites for the bulk movement of aggregate into Oxfordshire by rail and other infrastructure to support the supply of minerals in Oxfordshire.

Waste Planning Vision

3.5 The growth that is planned for Oxfordshire presents significant challenges for waste planning including that the waste generated by existing and new developments is managed and used in the most effective and sustainable way possible. The underlying philosophy is to seek to reduce waste generation and to see waste as a resource, through maximizing reuse, recycling and composting and recovery of value from residual waste.

3.6 The vision for waste planning in Oxfordshire in 2031 is that:

a) There will have been a transformation in the way that waste is managed in Oxfordshire, with:
   - increased re-use, recycling and composting of waste;
   - treatment (so far as is practicable) of all residual waste that cannot be recycled or composted; and
   - only the minimum amount of waste that is necessary being disposed of at landfill sites.

b) The county will remain largely self-sufficient in dealing with the waste it generates. An economically and environmentally efficient network of clean, well-designed recycling, composting and other waste treatment facilities will have been developed to recover material and energy from the county's waste and support its thriving economy.

c) Waste management facilities will be distributed across the county, with larger-scale and specialist facilities being located at or close to Oxford and other large towns, particularly the growth areas, and close to main transport links, and with smaller-scale facilities serving more local areas. Facilities will be located and managed to minimise the use of unsuitable roads, particularly through settlements, and other harmful impacts of waste management

development on Oxfordshire's communities and environment. This network of waste management facilities will have helped to build more sustainable communities that increasingly take responsibility for their own waste and keep to a minimum the distance waste needs to be moved within the county.

Waste Planning Objectives

3.7 The Oxfordshire Waste Planning Vision is supported by the following objectives which underpin the waste strategy and policies in this plan:

i. Make provision for waste management (including residual waste disposal) capacity that allows Oxfordshire to be net self-sufficient in meeting its own needs for municipal solid waste, commercial and industrial waste, and construction, demolition and excavation waste.

ii. Make provision for facilities for the management of agricultural waste, waste water, hazardous waste and radioactive waste produced in Oxfordshire, recognising that specialist facilities for hazardous and radioactive wastes often require provision at a sub-national or national level.

iii. Support initiatives that help reduce the amounts of waste produced and provide for the delivery, as soon as is practicable, of waste management facilities that will drive waste away from landfill and as far up the waste hierarchy[22] as possible; in particular facilities that will enable increased re-use, recycling and composting of waste and the recovery of resources from remaining waste.

iv. Seek to provide for waste to be managed as close as possible to where it arises, and encourage other areas to become net self-sufficient in meeting their own waste needs, to:
- minimise the distance waste needs to be transported by road;
- reduce adverse impacts of waste transportation on local communities and the environment; and
- enable communities to take responsibility for their own waste.

v. Provide for a broad distribution of waste management facilities to meet local needs across Oxfordshire and make more specific provision for larger facilities that are needed to serve the whole or more substantial parts of the county or a wider area.

vi. Seek to ensure that the waste management facilities required in Oxfordshire are provided as an integral part of the infrastructure of the county and where possible are located to enable local employment and local use of energy (heat and power) recovered from waste.

vii. Seek to maintain opportunity for necessary disposal of residual waste from Oxfordshire and other areas in operational landfill sites.

[22] The waste hierarchy is shown at paragraph 2.23.

viii. Avoid the unnecessary loss of green field land when making provision for sites for waste management facilities, giving priority to the re-use of previously developed land.

ix. Protect Oxfordshire's communities and natural and historic environments (including important landscapes and ecological, geological and archaeological and other heritage assets) from the harmful impacts of waste management development (including traffic).

x. Secure the satisfactory restoration of temporary waste management sites, including landfills, where the facility is no longer required or acceptable in that location.

4. MINERALS PLANNING STRATEGY

4.1 This section sets out the County Council's minerals planning strategy and policies for the plan period to 2031. Provision must be made for a steady and adequate supply of aggregate minerals over this period. The Council intends that this will be achieved by encouraging the use of secondary and recycled aggregates as well as by identifying areas for mineral working to meet the need for primary aggregates such as sand and gravel and crushed rock.

4.2 The strategy includes a spatial strategy for the delivery of the new mineral workings and other mineral supply facilities that are expected to be needed, which is illustrated on the minerals key diagram (Figure 9) at the end of this section, and policies which provide the context for considering future proposals for minerals development. It provides a policy framework for the identification of suitable sites in the Minerals and Waste Local Plan: Part 2 – Site Allocations development plan document and against which planning applications for new mineral workings and other developments will be considered.

4.3 The strategy also addresses safeguarding of mineral resources and infrastructure to ensure future availability of supply. A policy for restoration of mineral working recognises the temporary nature of mineral extraction and the importance of restoring sites to enhance the environment and to provide amenities for the public.

Recycled and secondary aggregate

4.4 In line with national policy, the contribution that recycled and secondary material can make to aggregate supply in Oxfordshire should be taken into account before the extraction of primary minerals is considered. Recycled and secondary aggregate in Oxfordshire currently includes:

- Locally derived construction and demolition waste;
- Locally derived road planings;
- Spent rail ballast (brought in by rail to a site at Sutton Courtenay).

4.5 Oxfordshire has permitted capacity for recycling approximately 0.9 million tonnes a year of construction and demolition waste (much of this is in temporary sites at quarries and landfill sites). Didcot A power station ceased to operate during 2013 and ash recycling at Didcot is not included in this figure. It is expected that ash from the energy recovery facility at Ardley that commenced operation in 2014 will be used as secondary aggregate. However, these secondary aggregates have different end uses: the power station ash was used for block making whereas incinerator bottom ash is largely used for sub-base in road construction.

4.6 The total production of recycled and secondary aggregate is difficult to quantify because it includes, for example, material from mobile crushing plants at building and road development sites which is recycled and sometimes re-used on site, and material which passes through waste transfer stations. Surveys of secondary and recycled aggregate producers in

Oxfordshire in 2012 and 2013 indicate a total of around 470,000 tonnes are produced each year, but it is likely that the overall supply was higher than that, as the surveys were not comprehensive.

4.7 National policy is to aim to source mineral supplies indigenously but there may also be opportunities for recycled or secondary aggregate materials to be supplied from outside the county. For example, china clay waste from Cornwall is supplied to London and use of this material as an aggregate in Oxfordshire could become economic in future, although there is no indication of this happening at least in the short term. In the interests of achieving an overall sustainable supply of minerals to Oxfordshire, where such material is sourced from distance it should where practicable be transported by rail rather than by road.

4.8 The supply of recycled and secondary aggregates in Oxfordshire will be limited largely by the scale of construction and demolition activity and the quantity of material available from that source for recycling. The aggregate materials produced generally vary in quality and cannot meet all specifications; for higher specification applications, use of high quality land-won aggregate is usually the only practical option.

4.9 The previous (withdrawn) Minerals and Waste Core Strategy included a policy target for recycled and secondary aggregate facility provision of 0.9 million tonnes per year. That target was from the now revoked South East Plan. It is now more appropriate for policy M1 not to set a specific target, which could be misconstrued as setting a maximum level to be achieved, but rather to seek to maximise the contribution to aggregate supply in Oxfordshire from recycled and secondary aggregate sources. Policy M1 is a positive policy to enable facilities to be provided in order to achieve this objective. The production of recycled and secondary aggregate will continue to be monitored to check whether this is being achieved through this policy or whether a different approach needs to be considered.

4.10 The targets in policy W2 for recycling of construction, demolition and excavation waste (increasing to 60% by 2021) and policies W3, W4 and W5 on waste management capacity requirements and provision and siting of facilities will operate in conjunction with policy M1 to deliver facilities for recycled aggregate production, which is expected to form the majority of recycled and secondary aggregate supply in Oxfordshire.

4.11 Provision for additional facilities for the production of recycled aggregates from construction and demolition waste will be made through the identification of sites in the Site Allocations Document, in line with policies W3, W4 and W5 on waste management capacity requirements and provision and siting of facilities. Policy W5 includes provision for recycling facilities to be located within the Green Belt where very special circumstances have been demonstrated; and policy C8 allows for small-scale facilities serving local needs to be provided in Areas of Outstanding Natural Beauty. Recycled and secondary aggregate facilities with permanent permission, or with temporary permission extending at least to the end of the plan period, will be

safeguarded under policy W11 and these sites will also be identified in the Site Allocations Document. Restoration of the sites of temporary facilities, including those located at quarries and landfill sites, will be required in line with policy M10.

4.12 **Policy M1: Recycled and secondary aggregate**

So far as is practicable, the need for aggregate mineral supply to meet demand in Oxfordshire should be met from recycled and secondary aggregate materials in preference to primary aggregates, in order to minimise the need to work primary aggregates.

The production and supply of recycled and secondary aggregate will be encouraged, in particular through:

- **Recycling of construction, demolition and excavation waste;**
- **Recycling of road planings;**
- **Recycling of rail ballast;**
- **Recovery of ash from combustion processes; and**
- **where available, the supply of secondary aggregates from sources outside Oxfordshire;**

to enable the contribution made by these materials towards meeting the need for aggregates in Oxfordshire to be maximised.

Where practicable, the transport of recycled and secondary aggregate materials from sources distant to Oxfordshire should be by rail.

Permission will be granted for facilities for the production and/or supply of recycled and secondary aggregate, including temporary recycled aggregate facilities at aggregate quarries and inert waste landfill sites, at locations that meet the criteria in polices W4, W5 and C1 – C11. Proposals for temporary facilities shall provide for the satisfactory removal of the facility. At mineral working and landfill sites the facility shall be removed when or before the host activity ceases. Temporary facility sites shall be restored in accordance with the requirements of policy M10 for restoration of mineral workings.

Sites for the production and/or supply of recycled and secondary aggregate will be safeguarded in accordance with policy W11.

Sites proposed or safeguarded for the production and/or supply of recycled and secondary aggregate will be identified in the Minerals & Waste Local Plan: Part 2 – Site Allocations Document.

Provision for working aggregate minerals

4.13 The National Planning Policy Framework requires mineral planning authorities to prepare an annual Local Aggregate Assessment based on a rolling average of 10 years sales data and other relevant local information, and an assessment of all supply options (including recycled and secondary aggregate

sources). The plan must make provision for the aggregate supply requirements identified in the Local Aggregate Assessment.

4.14 The County Council's Oxfordshire Local Aggregate Assessment 2014 sets the following requirements for provision for land-won aggregate supply:

- Sharp sand and gravel – 1.015 million tonnes a year;
- Soft sand – 0.189 million tonnes a year;
- Total sand and gravel – 1.204 million tonnes a year;
- Crushed rock – 0.584 million tonnes a year.

These figures will be revised on an annual basis through the annual Local Aggregate Assessment and will be superseded by the figures in the latest Local Aggregate Assessment.

4.15 Due to particular local factors in Oxfordshire, as identified in the Local Aggregate Assessment, for sharp sand and gravel and crushed rock these figures are higher than the 10 year average (2004 – 2013) of sales from Oxfordshire's quarries. In the case of soft sand the 10 year sales average (2003 – 2012) has been used. These figures are higher than the levels of sales in 2013 and provide significant headroom to accommodate possible changes in local circumstances such as an increase in economic activity and consequent demand for aggregates. Oxfordshire has been a net importer of sharp sand and gravel in recent years but these levels of provision will allow local production to increase again such that Oxfordshire meets its own needs for sharp sand and gravel, with flexibility for appropriate cross-boundary movements of aggregates. These provision figures will also allow Oxfordshire to continue to be a net exporter of soft sand, which is a less widely distributed mineral.

4.16 The crushed rock produced in Oxfordshire is generally of relatively low quality with limited end uses. Hard crushed rock is not available locally (apart from a small resource of harder limestone at Hatford) and will continue to be imported from elsewhere (particularly Somerset, South Gloucestershire and Leicestershire), to meet needs that require this type of aggregate. But Oxfordshire is one of the few places in the South East of England where there are resources of rock, and provision figures will enable the county to continue to make an appropriate contribution towards local and wider requirements for crushed rock.

4.17 National policy and guidance requires provision to be made for the maintenance of landbanks of reserves with planning permission of at least 7 years for sand and gravel and at least 10 years for crushed rock, based on the latest Local Aggregate Assessment. Policy M2 provides for this. In Oxfordshire sharp sand and gravel and soft sand generally occur in different locations and have distinct and separate uses and markets. In line with current national policy, separate landbanks will be maintained for these minerals. Where practicable, transport of crushed rock should be by rail.

4.18 The Local Aggregate Assessment is to be reviewed annually and the provision figures are likely to change as the 10 year sales average period moves forward and other relevant local information changes. Regular

monitoring of aggregates supply and demand in Oxfordshire will be carried out through the plan period and will be recorded in the Minerals and Waste Annual Monitoring Reports and used in the annual reviews of the Local Aggregate Assessment.

4.19 The current Local Aggregate Assessment annual figures indicate the following additional requirements for which provision needs to be made over the plan period (2014 to 2031), taking into account existing planning permissions:

- Sharp sand and gravel – 8.866 million tonnes;
- Soft sand – 1.238 million tonnes; and
- Crushed rock – no additional requirement.

If 'reserves' subject to a resolution to grant permission are also taken into account, the additional requirement for sharp sand and gravel is reduced to approximately 5.4 million tonnes. Table 2 shows how these requirements are calculated.

4.20 This is the current position but this may change over the plan period if the levels of annual provision change as the Local Aggregate Assessment is reviewed annually. Such changes are likely to be relatively small from one year to another but may add up to more substantial change over a period of years. The strategy for mineral working therefore needs to have sufficient flexibility to allow for changes in demand for locally supplied aggregates. Policy M2 therefore does not include the figures from the current Local Aggregate Assessment but instead makes a policy commitment to meeting the requirements in the most recent Local Aggregate Assessment. Provision to meet these requirements will be made through the identification of locations and allocation of sites under policies M3 and M4, taking into account the need for appropriate flexibility to enable the plan to be delivered.

Table 2: Aggregate provision required over plan period 2014 – 2031

	Sharp Sand & Gravel (million tonnes)	Soft Sand (million tonnes)	Crushed Rock (million tonnes)
A. Annual Provision (from LAA)	1.015	0.189	0.584
B. Requirement 2014 – 2031 (A x 18 years)	18.270	3.402	10.512
C. Permitted Reserves at end 2013	6.619	2.164	10.819
D. Permissions granted or confirmed since end 2013	2.785	0	0
E. Total permitted reserves (C + D)	9.404	2.164	10.819
F. Remaining requirement to be provided for in Plan (B – E)	8.866	1.238	0
G. Additional 'reserves' subject to resolution to grant permission	3.5 (approx.)	0	0
H. Remaining requirement to be provided for in Plan (assuming G is permitted) (F – G)	5.4 (approx.)	1.238	0

Notes:

1. Permissions since 2013 in row D comprise extension to Caversham Quarry (1.86 million tonnes) – permission granted 20 August 2014; and previously dormant reserves at Thrupp Farm, Radley (0.925 million tonnes) – confirmed as permitted reserves through the review of mineral permissions (ROMP) procedure.
2. The additional 'reserves' in row G comprise an extension to Gill Mill Quarry for which the County Council's Planning & Regulation Committee resolved on 13 January 2014 that, subject to the applicant entering a legal agreement and routeing agreement, permission be granted. The total additional permitted reserve will be 5.0 million tonnes sharp sand & gravel but it is estimated that at the proposed average working rate (0.325 million tonnes per annum) and taking into account existing permitted reserves remaining to be worked at the quarry only approximately 3.5 million tonnes of this would be worked within the plan period to the end of 2031.

4.21 **Policy M2: Provision for working aggregate minerals**

Provision will be made through policies M3 and M4 to enable the supply of aggregate minerals from land-won sources within Oxfordshire to meet the requirement identified in the most recent Local Aggregate Assessment throughout the period to the end of 2031.

Permission will be granted for aggregate mineral working under policy M5 to enable separate landbanks of reserves with planning permission to be maintained for the extraction of minerals of:

- **at least 7 years for sharp sand and gravel;**
- **at least 7 years for soft sand;**
- **at least 10 years for crushed rock;**

in accordance with the annual requirement rate in the most recent Local Aggregate Assessment.

Locations for working aggregate minerals

4.22 Minerals can only be extracted where they exist in the ground. The identification of locations where extraction is likely to be able to take place acceptably provides greater certainty of where mineral working will take place and where it will not take place. Policy M3 identifies the broad locations – strategic resource areas – within which it is proposed that future working for sharp sand and gravel, soft sand and crushed rock should take place. The strategic resource areas are indicated on the Minerals Key Diagram.

4.23 Within these strategic resource areas, sites for working will be allocated in the Site Allocations Document, taking into account all the other relevant polices of the Core Strategy.

4.24 The strategic resource areas have been broadly drawn to encompass the potentially workable mineral deposits within each area. Natural boundaries such as roads and rivers have been used where possible but elsewhere geological mapping information has been used. Areas of Outstanding Natural Beauty and Special Areas of Conservation have been excluded but other designations and constraints have not been taken into account at this stage. Larger settlements have also been excluded, but individual and smaller groups of houses and other more isolated built developments have not been excluded. These areas also do not necessarily exclude land allocated or proposed to be allocated for development in adopted or emerging district local plans and neighbourhood plans. All these factors will be taken into account in the assessment of sites for allocation in the Site Allocations Document.

4.25 Policy M4 sets out the criteria that will be used to assess potential sites for inclusion in the Site Allocations Document. These criteria are not listed in any order of priority. The strategic areas and the specific sites that are identified will provide a basis for the minerals industry to select sites for working and submit planning applications; and for those applications to be considered by the County Council, also taking into account all the other relevant policies of

the Plan. Policy M5 provides for permission to be granted for applications for mineral working within identified sites. It also sets out the circumstances under which permission may exceptionally be granted for mineral working in locations that are not identified.

4.26 The amount of provision that needs to be made through the allocation of sites for mineral working will be established in the Site Allocations Document, having regard to the levels of provision in the latest Local Aggregate Assessment but also taking into account the need for appropriate flexibility to allow for possible changes in demand and the level of certainty that allocated sites will come forward for working. Table 2 above indicates that there is currently no requirement for additional provision for crushed rock working. The areas for crushed rock working identified in policy M3 are included as a contingency in the event that the requirement for local crushed rock increases significantly and additional permitted reserves are required to maintain the landbank and ensure an adequate level of supply.

Sharp Sand and Gravel

4.27 At the current (2014) Local Aggregate Assessment requirement rate (1.015 million tonnes a year), existing planning permissions could on average provide for a supply of sharp sand and gravel until 2022, although in practice some sites will be exhausted sooner and others will last longer. The strategy in this document makes provision for sharp sand and gravel for the rest of the plan period, to 2031. It is expected that part of this outstanding provision requirement will be met by the proposed extension to Gill Mill Quarry, for which there is a resolution to grant permission (see Table 2, note 2).

4.28 Production of sharp sand and gravel in Oxfordshire has become increasingly concentrated in the northern part of the county (Cherwell and West Oxfordshire Districts), particularly in West Oxfordshire, with a decline in the proportion coming from quarries in the southern part (South Oxfordshire and Vale of White Horse Districts). Over the last 10 years an average of 74% of production has been from northern Oxfordshire. Although there are extensive remaining sand and gravel resources in West Oxfordshire, including within the current working areas of the Lower Windrush Valley and around Cassington, there are concerns about the rate and intensity of mineral working in the area and the consequent cumulative impact on local communities, generation of traffic, including on the A40, and impacts on local rivers and groundwater flows.

4.29 There is a broadly equal split in existing and forecast levels of economic growth and development between the northern and southern parts of the county (taking Oxford as a mid-point), and consequently it is expected that there will be a similar broadly equal split in the demand for aggregate within the county. The plan objectives include minimising the distance that minerals need to be transported by road, from quarry to market. In line with this, the minerals planning strategy should promote and enable a move over the plan period to a distribution of sharp sand and gravel production that more closely reflects the distribution of demand for aggregate within the county.

4.30 This means changing the balance of production capacity between the strategic resource areas in western Oxfordshire (mainly in West Oxfordshire District) and southern Oxfordshire (in South Oxfordshire and Vale of White Horse Districts), even though remaining resources of sharp sand and gravel are more extensive in West Oxfordshire. In view of the relatively high level of existing permitted reserves in the northern part of Oxfordshire (mainly in West Oxfordshire), any requirement for additional sites for sharp sand and gravel should be met primarily in the southern part of the county, at least over the first half of the plan period. Provision for additional sand and gravel working in southern Oxfordshire would enable local supplies of aggregate for planned housing and economic growth in this part of the county, including the Science Vale area. The Council will seek to achieve this objective of changing the balance of production capacity through the selection of sites to be allocated for sharp sand and gravel working in the Site Allocations Document.

4.31 Within southern Oxfordshire, the existing Sutton Courtenay Quarry has only a few years' worth of permitted reserves remaining and limited possibilities for further extensions; and other existing quarries are either already exhausted or small scale, with the exception of Caversham Quarry where a large extension was permitted in 2014 but which serves a market area in the far south east of the county extending into Reading and other parts of Berkshire. It is therefore likely that any significant requirement for additional sites in this part of the county will need to be met by a new working area within the Thames and Lower Thame Valleys area from Oxford to Cholsey. Potential site options within this strategic resource area will be assessed when the Site Allocations document is prepared and any selected site(s) will be identified in that document.

4.32 Some of the requirement may be met by sharp sand and gravel extracted in the construction of the proposed new conveyance channel (from Botley to Kennington) for the Oxford Flood Alleviation Scheme. The Environment Agency have estimated this could involve the extraction of approximately 500,000 cubic metres of sand and gravel (approximately 0.75 million tonnes). This proposal is still in preparation and a scheme has not yet been approved, designed or had planning permission granted. The earliest that approval will be given for a scheme to go ahead is spring 2018.

4.33 Within the northern part of the County, the only significant remaining resources of sharp sand and gravel lie within the strategic resource areas along the Thames Valley to the west/north of Oxford and the related Lower Windrush and Lower Evenlode Valleys (mostly in West Oxfordshire but partly in Cherwell District). Whilst any requirement for additional sites for sharp sand and gravel should be met primarily in the southern part of the county, in the event that further provision for working is also required from the northern part of the county in the plan period, this should be from within the Standlake to Yarnton area, which includes the existing working areas of the Lower Windrush Valley and around Cassington. Provision should not be made from the resource areas further to the west, around Bampton and Clanfield, primarily because these areas are further from the main locations of demand

for aggregate in Oxfordshire and lack suitable road access to the advisory lorry route network.

434 The Habitats Regulations Assessment screening report has concluded that a finding of no likely significant effect on Oxford Meadows Special Area of Conservation (SAC) cannot be reached in respect of land to the east and north east of the River Evenlode within the Eynsham / Cassington / Yarnton part of the Thames, Lower Windrush and Lower Evenlode Valleys (Standlake to Yarnton) strategic resource area. The Habitats Directive requires the Council to take a precautionary approach in the plan and therefore proposals should not involve mineral working within that part of the Eynsham / Cassington / Yarnton area. The screening report has also concluded that any proposals for working in the Eynsham / Cassington / Yarnton area would need to demonstrate that they would not affect water levels at Oxford Meadows SAC.

4.35 Potentially important archaeological constraints have been identified in the Lower Windrush Valley, south of Hardwick, and at a number of locations within the Thames and Lower Thame Valleys (Oxford to Cholsey) strategic resource area. The Council will work with English Heritage to ensure that important archaeology is given appropriate protection, in particular when sites for mineral working are identified in the Site Allocations document.

Soft sand

4.36 Soft sand accounts for approximately 20% of sales of all sands and gravels in Oxfordshire. Soft sand resources are limited to the Corallian Ridge area between Oxford and Faringdon, where most existing quarries are located, and a smaller area at Duns Tew, where there is a single quarry. Two types of soft sand are worked, supplying different markets: sand from the Tubney area generally meets higher specifications than sand from the Faringdon area. The strategy in policy M3 should enable both types of soft sand to continue to be worked.

4.37 At the current (2014) Local Aggregate Assessment requirement rate (0.189 million tonnes a year), existing planning permissions could on average provide a supply of soft sand until 2024, although in practice some sites will be exhausted sooner and others will last longer. The additional requirement for soft sand working over the plan period should be met from sites within the two resource areas, but mainly from the Corallian Ridge area.

4.38 For the period to 2031, it would be generally preferable for further soft sand working to be from extensions to existing quarries where this is possible, rather than from new quarries. This would make efficient use of existing plant and infrastructure and minimise additional impact. Potential site options within the strategic resource areas will be assessed when the Site Allocations Document is prepared and any selected sites will be identified in that Document.

4.39 The Habitats Regulations Assessment screening report has concluded that proposals for mineral working within the Corallian Ridge area from Oxford to Faringdon would need to demonstrate that they would not affect water levels at Cothill Fen SAC.

Crushed rock

4.40 At the current (2014) Local Aggregate Assessment requirement rate (0.584 million tonnes a year), current permitted reserves of crushed rock could on average last until 2031, although in practice some sites will be exhausted sooner and others will last longer. Production of crushed rock has fluctuated considerably over past years. Existing working areas of limestone are south east of Faringdon, south of Burford and north west of Bicester. There is one existing area of ironstone working in the north of the county at Alkerton / Wroxton.

4.41 The ironstone resource area in the north of the county is less well located relative to strategic routes and market areas in Oxfordshire than are some areas of limestone resource. In the 1950s the Minister of Housing and Local Government granted planning permissions for working a total of some 1250 hectares of ironstone bearing land. This was to meet a need for raw material to supply the iron and steel industry. That need no longer exists and quarried ironstone has for many years mainly been used as aggregate, with small quantities used as building stone. A large part of the permitted land, in the vicinity of Shenington, is the subject of a prohibition order confirmed by the Secretary of State in January 2015, which means that the land concerned no longer has permission for mineral extraction. In the vicinity of Hornton, Wroxton and Alkerton there remain substantial reserves of ironstone with permission to be worked.

4.42 There is no need to permit any additional land for ironstone working for aggregate use during the plan period. In any case, better quality aggregate is generally available from within the limestone deposits than from the ironstone. Any additional provision that is required for crushed rock should be made within the limestone areas. Permission for new areas of ironstone working will therefore not be granted unless the applicant is willing to give up an equivalent existing permitted area, such that there would be an overall environmental benefit, and this can be ensured through revocation of the permission or other appropriate mechanism without payment of compensation.

4.43 The Local Aggregate Assessment 2014 indicates no requirement for further areas for crushed rock working during the plan period but, if demand increases significantly, additional permissions could be needed towards the end of the plan period. If required, this additional provision should preferably be made through extensions to existing quarries rather than from new quarries, to make efficient use of existing plant and infrastructure, and minimise additional impact. It is unlikely that any new quarries will be needed during the period of this plan. In view of this, and given that crushed rock resources in Oxfordshire – in particular the resources of limestone outside of

Areas of Outstanding Natural Beauty – are extensive, strategic resource areas for possible future crushed rock working are included in policy M3 but there may not be any requirement for specific sites to be identified in the Site Allocations Document.

All aggregates

4.44 Government policy is that major minerals developments should only be permitted in Areas of Outstanding Natural Beauty (AONB) in exceptional circumstances and that landbanks of aggregate minerals should, as far as is practical, be maintained from outside AONBs, World Heritage Sites, Scheduled Monuments and Conservation Areas. There are sufficient aggregate resources in Oxfordshire outside these designated areas and sites such that working within them is not necessary. Policy C8 provides protection for the landscape quality of the county and policy C9 provides protection for the historic environment.

4.45 **Policy M3: Principal locations for working aggregate minerals**

The principal locations for aggregate minerals extraction will be within the following strategic resource areas, as indicated on the Minerals Key Diagram:

Sharp sand and gravel

- **The Thames, Lower Windrush and Lower Evenlode Valleys area from Standlake to Yarnton;**
- **The Thames and Lower Thame Valleys area from Oxford to Cholsey;**
- **The Thames Valley area from Caversham to Shiplake.**

Soft sand

- **The Corallian Ridge area from Oxford to Faringdon;**
- **The Duns Tew area.**

Crushed rock

- **The area north west of Bicester;**
- **The Burford area south of the A40;**
- **The area east and south east of Faringdon.**

Specific sites for working aggregate minerals will be identified within these strategic resource areas in the Minerals & Waste Local Plan: Part 2 – Site Allocations Document.

4.46 Policy M4: Sites for working aggregate minerals

Specific sites for working aggregate minerals within the strategic resource areas identified in policy M3, to meet the requirements set out in policy M2, will be allocated in the Minerals & Waste Local Plan: Part 2 – Site Allocations Document, in accordance with the following criteria:

a) **consideration of the quantity and quality of the mineral resource;**

b) **achieving a change over the course of the plan period in the balance of production capacity for sharp sand & gravel between the strategic resource areas in western & southern Oxfordshire to more closely reflect the distribution of demand within the county;**

c) **priority for the extension of existing quarries, where environmentally acceptable (including taking into consideration criteria d) to m)) and after consideration of criterion b), before working new sites;**

d) **potential for restoration and after-use and for achieving the restoration objectives of the Plan in accordance with policy M10;**

e) **suitability & accessibility of the primary road network;**

f) **proximity to large towns and other locations of significant demand to enable a reduction in overall journey distance from quarry to market;**

g) **ability to provide more sustainable movement of excavated materials;**

h) **avoidance of locations within or significantly affecting an Area of Outstanding Natural Beauty;**

i) **avoidance of locations likely to have an adverse effect on sites and species of international nature conservation importance and Sites of Special Scientific Interest; in the case of locations within the Eynsham / Cassington / Yarnton part of the Thames, Lower Windrush and Lower Evenlode Valleys area, it must be demonstrated that there will be no change in water levels in the Oxford Meadows Special Area of Conservation and the proposal must not involve the working of land to the north or north east of the River Evenlode; in the case of locations within the Corallian Ridge area, it must be demonstrated that there will be no change in water levels in the Cothill Fen Special Area of Conservation;**

j) **avoidance of locations likely to have an adverse effect on designated heritage assets, including World Heritage Sites, Scheduled Monuments and Conservation Areas, or on archaeological assets which are demonstrably of equivalent significance to a Scheduled Monument;**

k) **avoidance of, or ability to suitably mitigate, potential significant adverse impacts on:**

i. **locally designated areas of nature conservation and geological interest;**
ii. **local landscape character;**
iii. **water quality, water quantity, flood risk and groundwater flow;**
iv. **agricultural land and soil resources;**
v. **local transport network;**
vi. **land uses sensitive to nuisance (e.g. schools & hospitals);**
vii. **residential amenity & human health; and**
viii. **character and setting of local settlements;**

l) **potential cumulative impact of successive and/or simultaneous mineral development, including with non-mineral development, on local communities;**

m) **ability to meet other objectives and policy expectations of this Plan (including policies C1 – C11) and relevant polices in other development plans.**

4.47 Policy M5: Working of aggregate minerals

Permission will be granted for the working of aggregate minerals within the sites allocated further to policy M4 provided that the requirements of polices C1 – C11 are met.

Permission will not be granted for the working of aggregate minerals outside the sites allocated further to policy M4 unless the requirement to maintain a steady supply of aggregate in accordance with policy M2 cannot be met from within those sites. The criteria in policy M4 will be taken into consideration in the determination of planning applications for aggregate minerals working in locations not allocated under policy M4.

Permission will exceptionally be granted for the working of aggregate minerals outside the sites allocated further to policy M4 where extraction of the mineral is required prior to a planned development in order to prevent the mineral resource being sterilised, having due regard to polices C1 – C11.

Prior to the adoption of the Minerals & Waste Local Plan: Part 2 – Site Allocations Document, permission will be granted for the working of aggregate minerals where this is required in order to maintain landbanks in accordance with policy M2 and taking into consideration the criteria in policy M4 and provided that the requirements of polices C1 – C11 are met.

Notwithstanding the preceding paragraph, permission for working of ironstone for aggregate use will not be permitted except in exchange for an agreed revocation (or other appropriate mechanism to ensure the

non-working) without compensation of an equivalent existing permission in Oxfordshire containing potentially workable resources of ironstone and where there would be an overall environmental benefit.

Imported aggregate and rail depots

4.48 Aggregates are imported through three rail depots at Banbury, Sutton Courtenay and Kidlington[23]. Planning permission has been granted for a further rail depot at Shipton on Cherwell. There is also a depot at Hinksey Sidings, Oxford but has been used solely by the rail industry to bring in rail ballast for internal use on the rail network, and its use for the transhipment of rail ballast has been intermittent[24].

4.49 There will be an ongoing need for importation of aggregate materials that cannot be quarried locally, particularly hard rock for roadstone. Rail and water transport should take priority over road, particularly for longer distance movements. Existing and permitted depots should therefore be safeguarded; and additional depots should be permitted at suitable locations should the opportunity arise.

4.50 District Councils are asked to consult the County Council on all planning applications for non-mineral related development that affect a safeguarded aggregate rail depot site as set out at paragraph 4.70 below, under safeguarding mineral infrastructure.

4.51 **Policy M6: Aggregate rail depots**

The following rail depot sites are safeguarded for the importation of aggregate into Oxfordshire:

- **Hennef Way, Banbury (existing facility);**
- **Kidlington (permitted replacement facility);**
- **Appleford Sidings, Sutton Courtenay (existing facility);**
- **Shipton on Cherwell Quarry (permitted facility);**
- **and any other aggregate rail depot sites which are permitted, as identified in the Annual Monitoring Report.**

Permission will be granted for new aggregate rail depots at locations with suitable access to an advisory lorry route shown on the Oxfordshire Lorry Route Maps (policy C10) and that meet the criteria in polices C1 – C11.

Safeguarded rail depot sites will be identified in the Minerals & Waste Local Plan: Part 2 – Site Allocations Document.

[23] The Kidlington rail depot is being relocated to a nearby permitted site to enable the construction of a new station at Water Eaton.

[24] The rail depot at Hinksey Sidings, Oxford is solely for the supply of ballast to Network Rail and is not therefore considered part of the County's aggregates supply.

Proposals for development that would directly prevent or prejudice the use of a safeguarded rail depot site for an aggregates rail depot will not be permitted unless:

- **a suitable alternative rail depot site can be provided; or**
- **it can be demonstrated that there is no longer a need for the site to be safeguarded for aggregate rail depot use.**

Proposals on land near to a safeguarded rail depot site for development sensitive to disturbance from, and which would indirectly prevent or prejudice the operation or establishment of, an aggregate rail depot at the safeguarded site will not be permitted unless:

- **the development is in accordance with a site allocation for development in an adopted local plan or neighbourhood plan; or**
- **a suitable alternative aggregate rail depot site can be provided; or**
- **it can be demonstrated that the safeguarded rail depot site is no longer needed for Oxfordshire's aggregate supply requirements.**

Non-aggregate mineral working

Building Stone

4.52 The Council recognises the importance of small scale building, roofing and walling stone extraction in rural areas for the conservation and restoration of historic buildings and to maintain local distinctiveness in new development. Limestone is particularly important for maintaining the built environment in the Cotswolds Area of Outstanding Natural Beauty (see also paragraph 6.42 and policy C8).

4.53 The salvage and re-use of traditional stone from historic buildings that cannot be retained can contribute to the conservation of those historic traditional buildings that can be retained. This will be encouraged through the waste management policies of the plan.

4.54 Large quantities of waste stone can be generated during the extraction of building stone, particularly in the initial phases of working. Waste stone may have a potential use as aggregate; the use or disposal of it is an issue which needs to be considered on a case by case basis through a planning application.

Clay

4.55 Clay has been worked at certain sand and gravel quarries to produce material for lining landfill sites and for use in restoration and landscaping. In accordance with policy M4, within the Eynsham / Cassington / Yarnton area working of clay associated with sand and gravel extraction should only be permitted if it can be demonstrated that it would not lead to changes in water levels in the Oxford Meadows Special Area of Conservation.

Chalk

4.56 Chalk has been extracted in Oxfordshire in the past, in particular for industrial and agricultural uses. Some types of chalk can also be used as a low-grade aggregate. There is no current indication of demand for a resumption of chalk working during the plan period but, in the event there is, this could be accommodated on a small scale basis in suitable locations. Most of Oxfordshire's chalk resource lies within the North Wessex Downs and Chilterns Areas of Outstanding Natural Beauty, which would need to be given appropriate protection in accordance with policy C8. In line with policy M4, it is unlikely that working of chalk for aggregate use would be acceptable within these areas.

Fuller's earth

4.57 Fuller's earth is a nationally scarce industrial mineral which occurs in the Baulking – Fernham area in the south west of the county. It was previously worked but, whilst there are remaining resources that are potentially workable, there has been no market for this mineral for a number of years and there is no indication that this position is likely to change during the plan period.

Oil and gas

4.58 There is currently no exploration for or production of oil or gas in Oxfordshire. Exploratory work in the past did not find any oil or gas fields, although gas was encountered in some of the holes drilled. In addition to requirements for planning permission, oil and gas exploration and production can only be undertaken within areas that have been licensed by the government. There are currently no licence areas covering Oxfordshire. In July 2014 the government invited applications for onshore oil and gas licences under the 14th Landward Licensing Round. Under this licensing round, large parts of the UK are potentially available for licence, including some parts of Oxfordshire, as identified in a strategic environmental assessment that was published by the government in December 2013[25]. It is not yet known whether licences have been applied for or will be awarded covering any parts of the county.

4.59 In the event that licences are awarded covering parts of Oxfordshire, it is possible that proposals for exploratory drilling would come forward, which could be followed by proposals for production in the event that significant oil or gas reserves were found. Proposals could be for drilling either by conventional means or by hydraulic fracturing (fracking). The section on oil and gas in policy M7 will provide a policy basis consistent with the National Planning Policy Framework and national guidance on oil and gas against which any such planning applications can be considered.

4.60 **Policy M7: Non- aggregate mineral working**

All proposals for the working of non-aggregate minerals, including exploration and appraisal, shall meet the criteria in policies C1 – C11.

[25] Strategic Environmental Assessment for Further Onshore Oil and Gas Licensing – Environmental Report, AMEC for DECC, December 2013

Building Stone
Permission will be granted for extensions to existing quarries and new quarries for the extraction of building stone where a need for the material has been demonstrated and the proposed quarrying is small-scale.

Clay
The extraction of clay will be permitted in conjunction with the working of sharp sand and gravel from the locations in policy M3. The extraction of clay will not be permitted in other locations unless it can be demonstrated that there is a local need for clay which:

- **cannot be met by extraction in conjunction with sharp sand and gravel working; or**
- **would be met with less overall environmental impact than by extraction in conjunction with sharp sand and gravel working.**

Chalk
The extraction of chalk for agricultural or industrial use in Oxfordshire will be permitted provided the proposed quarrying is small-scale and a local need for the material has been demonstrated. Extraction of chalk for wider purposes, including as an aggregate or for large scale engineering will not be permitted unless the proposal is demonstrated to be the most sustainable option for meeting the need for the material.

Fuller's Earth
The working of fuller's earth will be permitted provided that a national need for the mineral has been demonstrated.

Oil and Gas (conventional and unconventional)
Proposals for the exploration and appraisal of oil or gas will be permitted provided arrangements are made for the timely and suitable restoration and after-care of the site, whether or not the exploration or appraisal operation is successful.

The commercial production of oil and gas will be supported in the following circumstances:

- **A full appraisal programme for the oil or gas field has been successfully completed; and**
- **The proposed location is the most suitable, taking into account environmental, geological, technical and operational factors; and**
- **For major development in an Area of Outstanding Natural Beauty it is clearly demonstrated that the proposal is in the public interest, including in terms of national considerations.**

Safeguarding mineral resources

4.61 Mineral deposits are finite resources and can only be worked where they exist in the ground. It is Government policy that important mineral resources should

be safeguarded for the long term. Mineral planning authorities are required to define Mineral Safeguarding Areas in minerals plans so that resources are not sterilised by non-mineral development, although there is no presumption that the resources will be worked. The County Council will have regard to the British Geological Survey good practice advice on mineral safeguarding[26].

4.62 Sharp sand and gravel, soft sand and limestone are currently and will continue to be worked in Oxfordshire. Fuller's earth is no longer worked but is a nationally scarce mineral. It is therefore proposed to safeguard what are currently considered to be the economically viable areas of these resources. Whilst ironstone is also currently worked, there is no need for this mineral to be safeguarded as an aggregate resource in view of the extensive resources of better quality limestone in the county. Limestone and ironstone are not safeguarded as potential resources of building stone in view of the variability of these minerals and the lack of clear information on deposits and locations where safeguarding is justified.

4.63 Mineral safeguarding areas will be defined on maps in the Site Allocations Document. The extent of safeguarded areas can be reviewed if economic or other considerations change.

4.64 District councils in Oxfordshire are responsible for planning development (other than minerals and waste) in their areas. The County Council, as Mineral Planning Authority, must also identify mineral consultation areas and specify the types of application for non-mineral related development on which the relevant district council must consult the County Council within these areas. The mineral consultation areas will be based on the minerals safeguarding areas and will include land within 250m of the boundary of a Minerals Safeguarding Area. They will be identified and updated when necessary in the Minerals and Waste Annual Monitoring Reports.

4.65 **Policy M8: Safeguarding mineral resources**

Mineral Safeguarding Areas will be defined in the Minerals and Waste Local Plan: Part 2 – Site Allocations Document, covering the following mineral resources:

- **Sharp sand and gravel in the main river valleys, including the strategic resource areas identified in policy M3, and other areas of proven resource;**
- **Soft sand within the strategic resource areas identified in policy M3;**
- **Limestone within the strategic resource areas identified in policy M3;**
- **Fuller's earth in the Baulking – Fernham area.**

Mineral resources in these areas are safeguarded for possible future use. Development that would prevent or otherwise hinder the possible

[26] Mineral Safeguarding in England: good practice guidance, British Geological Survey, 2011

future working of the mineral will not be permitted unless it can be shown that:

- **The site has been allocated for development in an adopted local plan or neighbourhood plan; or**
- **The need for the development outweighs the economic and sustainability considerations relating to the mineral resource; or**
- **The mineral will be extracted prior to the development taking place.**

Mineral Consultation Areas, based on the Mineral Safeguarding Areas, will be defined, identified and updated when necessary in the Minerals and Waste Annual Monitoring Reports.

Safeguarding mineral infrastructure

4.66 It is also important that the infrastructure that supports the supply of minerals is safeguarded. Safeguarding of minerals infrastructure is a requirement of the NPPF (paragraph 143) and includes sites for and facilities associated with the transport of minerals by rail or water; sites for the manufacture of aggregate mineral products; and sites for the handling, processing and distribution of recycled and secondary aggregate material. The National Planning Practice Guidance gives the reasons for such safeguarding as being to:

- ensure that sites for these purposes are available should they be needed; and
- prevent sensitive or inappropriate development that would conflict with the use of sites identified for these purposes.

4.67 Mineral infrastructure sites may be of a relatively low land value and could be vulnerable to pressures for redevelopment for other uses. However, they could be difficult or impossible to replace if lost to other uses. The continued operation of mineral infrastructure could also be prejudiced by other, non-compatible development (such as housing) being located on nearby land.

4.68 In line with this national policy and guidance, the Council considers that the following infrastructure is important to support the supply of minerals in Oxfordshire and should be safeguarded:

- existing and permitted quarries (with remaining permitted reserves) and the processing and other ancillary plant and facilities associated with them;
- aggregate rail depots and wharves, rail links to quarries and other bulk mineral transport facilities, and the processing and other ancillary plant and facilities associated with them;
- industrial manufacturing plant using minerals, such as roadstone coating, concrete batching and concrete product plants;
- processing and other plant and facilities for the production or supply of recycled and/or secondary aggregate materials; and
- any sites proposed through the Minerals and Waste Local Plan for any of these uses.

4.69 The National Planning Practice Guidance advises that, except where they are located at quarries, aggregate wharves or rail terminals, safeguarding of facilities for the storage, handling and transport of minerals in local plans will rest largely with the district planning authority. Policy M9 therefore relates only to safeguarding of sites and infrastructure for which the County Council is the planning authority.

4.70 District Councils are asked to consult the County Council on all planning applications for non-mineral related development that affect a safeguarded site. This will allow the County Council as the mineral planning authority to consider any mineral planning issues raised. The District Councils will also be asked to consult the County Council on proposals for development that may be incompatible with and/or prejudicial to the future of a safeguarded facility. The County Council will provide further guidance on the types of development on which consultation should take place and maps of the safeguarded sites and a consultation zone around each site[27].

4.71 Policy M9: Safeguarding mineral infrastructure

Existing and permitted infrastructure that supports the supply of minerals in Oxfordshire is safeguarded against development that would unnecessarily prevent the operation of the infrastructure or would prejudice or jeopardise its continued use by creating incompatible land uses nearby.

Safeguarded sites will be identified in the Minerals and Waste Local Plan: Part 2 – Site Allocations Document.

Proposals for development that would prevent or prejudice the use of a site safeguarded for mineral infrastructure will not be permitted unless:

- **the development is in accordance with a site allocation for development in an adopted local plan or neighbourhood plan; or**
- **it can be demonstrated that the infrastructure is no longer needed; or**
- **the capacity of the infrastructure can be appropriately and sustainably provided elsewhere.**

Restoration and after-use of mineral workings

4.72 Mineral extraction is a temporary operation and therefore sites must be restored following mineral working to an agreed restoration scheme. Restoration has moved on from just returning land to the previous use (often agricultural). Once mineral workings have fulfilled their primary purpose of providing minerals, the restoration of these sites can have major environmental benefits through providing for a range of beneficial after-uses. Mineral working can provide opportunities for environmental improvements

[27] Consultation zones are likely to be in the order of 250 metres around the safeguarded site boundary.

such as new or increased habitat, geodiversity interpretation and education, improved public access and in relation to historic environment (e.g. provision of public access to and information on archaeological discoveries), which benefit the local community and may offset the impact of working. Within flood plain areas, restored sand and gravel workings can reduce the risk of flooding by providing for increased flood water storage capacity and improved conveyance of flood water.

4.73 There is considerable potential both for linking existing areas of habitat and creating new areas of habitat for wildlife and, in doing so, contributing towards existing ecological networks, supporting habitat priorities and helping to meet national and local habitat creation targets. Whilst new habitat has been delivered in Oxfordshire as a result of the restoration of mineral workings, opportunities have been missed in the past. With a suitable policy framework, and careful planning at an early stage, the level of high-quality habitat delivered through mineral working can be increased, creating valuable places for both wildlife and people.

4.74 Proposals for restoration, aftercare and after-use should be submitted with applications for mineral working, should include provision for long-term maintenance of the after-use and enhancement of the environment and should accord with District Local Plan policies, including environmental protection, countryside and access enhancement and noise management. Proposals for restoration should demonstrate that local communities have been consulted on options for after use. Restoration schemes should identify the intended after-use(s) and clearly set out the stages and design of the restoration. Schemes should include an end date by which restoration works will be completed and a programme for the aftercare of the restored site.

4.75 The restoration of each mineral working site should be determined on its individual merits and circumstances. Restoration to the original land-use may not be the best option and is not always possible. Restoration to an alternative use (e.g. creation of priority habitat) may be equally acceptable or preferable. Generally, nature conservation, agriculture, woodland and recreation are acceptable restoration after-uses for mineral workings, subject to the particular local circumstances such as the existing and neighbouring habitats, biodiversity and landscape. Each restoration scheme should have a coherent land use strategy with a particular primary end use or end uses. Measures to conserve and enhance biodiversity should always be incorporated in restoration schemes, such that restoration schemes deliver a net gain in biodiversity.

4.76 A biodiversity-led restoration strategy should include:

a) treating biodiversity as the primary consideration in the restoration of mineral sites;
b) giving preference to allocating and / or permitting mineral development in areas where it will have the greatest potential to maximise biodiversity benefits (i.e. within Conservation Target Areas) (policy M4 d));

c) creation of priority habitat at a landscape scale, either on individual sites or on clusters of sites in close proximity;
d) integration of habitat creation on restored mineral sites into the existing ecological network in the surrounding area; and
e) targets for the area of priority habitat that will be created on sites identified for mineral working in the Site Allocations Document.

4.77 Restoration schemes should assist or achieve priority habitat or species targets and objectives, including targets and objectives relating to the Oxfordshire Biodiversity Action Plan, Conservation Target Areas, the Upper Thames River Valleys Futurescape and Living Landscapes projects, any Nature Improvement Areas, and relevant National Character Areas. Where restoration could protect and/or improve geodiversity and increase interpretation and educational opportunities this should be incorporated into the proposed restoration scheme, such as by providing for important geological faces to be left exposed and enabling access to the faces.

4.78 Where a mineral working site has the potential to enhance green infrastructure, including appropriate sport, recreational and other local amenity uses, provision for this enhancement and these uses should be incorporated into the restoration scheme. Within the Lower Windrush valley, proposals for mineral working and restoration should recognise the role of the Lower Windrush Valley Project. Within the floodplain, restoration of mineral workings should where possible include provision for increased flood storage capacity to reduce the risk of flooding elsewhere.

4.79 Mineral working involves disturbance and change to the landscape. Restoration should be planned to be undertaken in a timely and phased manner. It should take place as soon as possible after working, to minimise the impact of open quarry workings, and should respect and where possible enhance the local landscape character. Wherever possible, particularly in the case of larger workings, restoration should commence before working has ended and should be carried out progressively as close as possible behind the working. In some cases, temporary biodiversity interests may exist in specific parts of working quarries which are worthy of retention for a time. Such temporary habitats may be locally significant and should be taken into consideration when working and restoration schemes and timetables are being devised.

4.80 There is increasing difficulty in securing material for restoration, and policy W6 seeks to ensure that inert waste is prioritised for use in mineral restoration schemes. The County Council will work with the District Councils to secure this, but the shortage of suitable material may result in restoration that relies on infilling with inert waste taking some years to complete.

4.81 Because of a general shortage of inert waste material for infilling, sand and gravel workings in the river valleys are often restored to wetlands. In the flood plain, when suitable material is available, consideration should always be given to filling below original land levels to improve flood storage capacity. This should be done on a site specific basis with an assessment of the impact

on groundwater aquifers. The Environment Agency should be consulted at an early stage to establish the extent to which waste material can be used to restore sand and gravel workings in the flood plain[28].

4.82 The risk to aircraft from bird strike is also an important consideration and this may restrict the location of some workings and/or affect the design of restoration schemes, as most of Oxfordshire's sand and gravel resources (and some sand and limestone resources) lie within 13 kilometres of a military airfield or civilian aerodrome[29]. Within these areas, proposals for working, restoration and after-use will need to be drawn up and designed in consultation with the MOD and/or Oxford Airport; and consultation with relevant biodiversity organisations may also be helpful. A bird hazard management plan may need to be prepared as part of a planning application. The careful use of inert fill and other engineering techniques can help to reduce the area of open water created. Restoration to open water also offers limited ecological value and restoration that increases the area of wetland (including wet woodland, reedbeds and pond complexes) and species-rich meadow habitat will be encouraged where possible, particularly where this would support habitat priorities and help to meet national and local habitat creation targets. These habitats offer a lower risk of bird strike and greater value for biodiversity than open water.

4.83 It is important that restoration is achieved to a high standard and this will generally be required through conditions attached to planning permissions. Planning conditions can provide for aftercare provisions to be put in place for a period of up to five years following restoration, to successfully establish an after-use: longer term management may be secured through legal agreement and will be sought where necessary, for example many habitats and species require a period longer than 5 years to become successfully established. (In Oxfordshire the standard long-term management period is 20 years, in addition to the 5 years of statutory aftercare.) Such agreements may also be sought to secure a desired long term management strategy, particularly where public access is also anticipated. Financial guarantees to secure satisfactory restoration may be justified, but only in exceptional circumstances[30].

4.84 Policy M10 sets out the general approach to restoration of mineral workings. Core policies C2 to C11 are also relevant when considering the type of after-use that may be appropriate and the content of a restoration scheme.

4.85 **Policy M10: Restoration of mineral workings**

Mineral workings shall be restored to a high standard and in a timely and phased manner to an after-use that is appropriate to the location

[28] The Topic Paper on Restoration explains in more detail the circumstances in which waste can be used to help restore workings in the flood plain.

[29] MoD and/or Oxford Airport should be consulted and involved in the design of restoration schemes for mineral workings within 13 km of specified airfields or the need for a bird hazard management plan. Relevant biodiversity organisations should also be involved as appropriate.

[30] National Planning Policy Guidance on Minerals advises that financial guarantees can be sought for a novel or untested form of restoration or where there is reliable evidence of a potential technical or financial failure.

and delivers a net gain in biodiversity. The restoration of mineral workings must take into account:

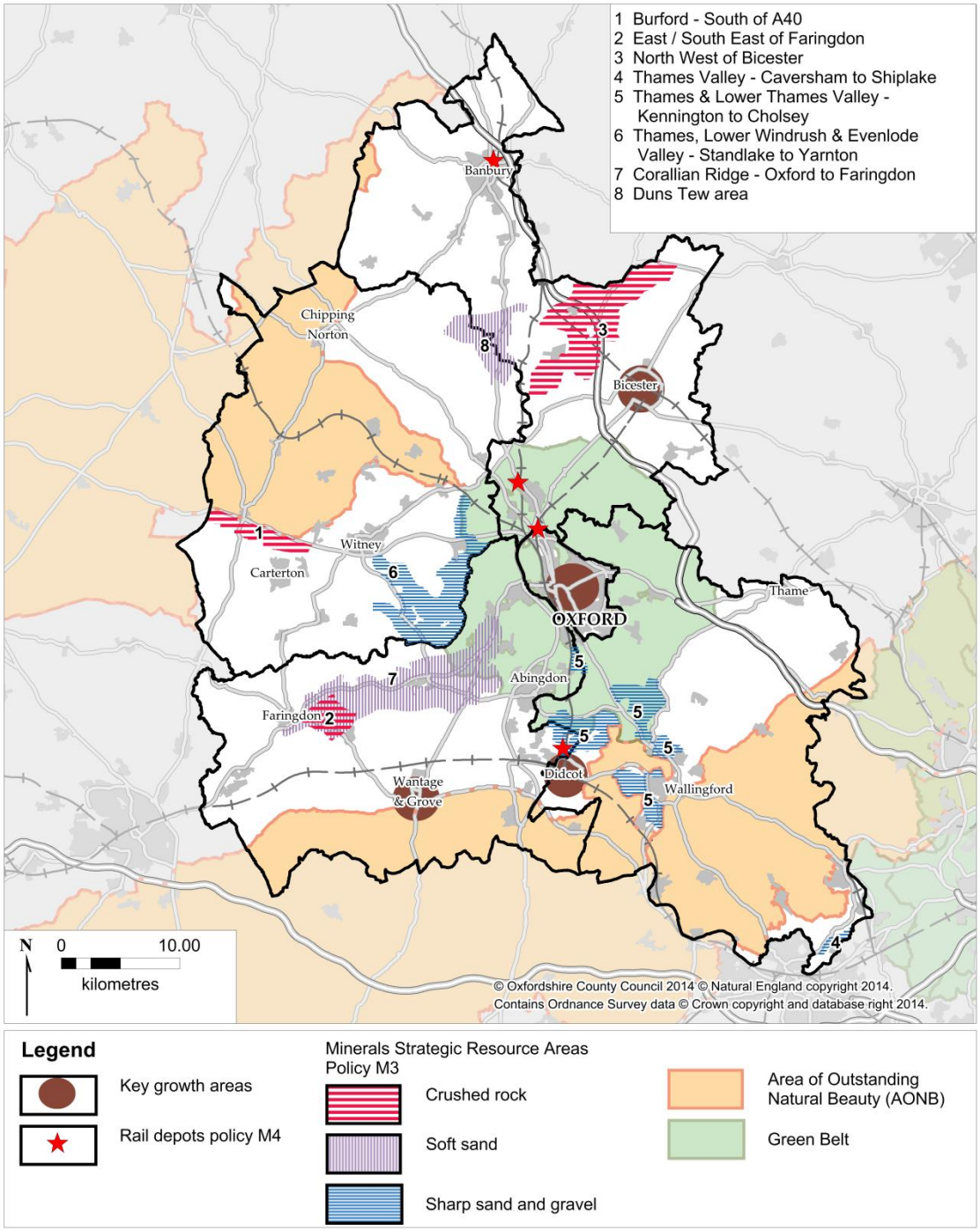
- **the characteristics of the site prior to mineral working;**
- **the character of the surrounding landscape and the enhancement of local landscape character;**
- **the amenity of local communities, including opportunities to enhance green infrastructure provision and provide for local amenity uses and recreation;**
- **the capacity of the local transport network;**
- **the quality of any agricultural land affected;**
- **flood risk and opportunities for increased flood storage capacity;**
- **bird strike risk and aviation safety;**
- **any environmental enhancement objectives for the area;**
- **the conservation and enhancement of biodiversity appropriate to the local area, supporting the establishment of a coherent and resilient ecological network through the landscape-scale creation of priority habitat;**
- **the conservation and enhancement of geodiversity; and**
- **the conservation and enhancement of the historic environment.**

Planning permission will not be granted for mineral working unless satisfactory proposals have been made for the restoration, aftercare and after-use of the site, including where necessary the means of securing them in the longer term.

Proposals for restoration must not be likely to lead to any increase in recreational pressure on a Special Area of Conservation.

Figure 9: Minerals Key Diagram

Area 7 boundary to be amended to exclude catchment area around Cothill Fen SAC; SACs to be shown on map and added to key



5. WASTE PLANNING STRATEGY

5.1 This section sets out the County Council's waste planning strategy and policies for the period to 2031. Provision must be made for the facilities that will be needed for the management of waste in the county during that period. The Council intends that this will be achieved in a way that promotes and enables the movement of waste up the waste management hierarchy, away from landfill and towards increased re-use, recycling, composting and recovery of resources from waste.

5.2 How many and what sort of waste facilities will be needed in Oxfordshire over this period cannot be predicted with absolute accuracy. The strategy can only be based on the best information currently available. A separate Waste Needs Assessment[31] sets out estimates of the quantities of waste that will need to be managed in Oxfordshire; the waste management capacity currently available; and the additional capacity that may be required up to 2031. These will be monitored regularly and updated in the Council's Minerals and Waste Annual Monitoring Reports.

5.3 The strategy includes a spatial framework for the delivery of new waste infrastructure (as illustrated on the waste key diagram – Figure 12 at the end of this section) and policies which provide the context for considering future proposals for waste development. The strategy provides a strategic policy framework for the identification of suitable sites in the Minerals and Waste Local Plan: Part 2 – Site Allocations development plan document and against which planning applications for new waste management facilities will be considered.

The amounts of waste to be managed

5.4 Attitudes and behaviour towards waste continue to change and the amount of waste produced per person has fallen along with the amount of waste disposed in landfill. However, the amount of waste produced in Oxfordshire is still expected to grow as population increases and the local economy develops, particularly in the main urban areas of Oxford, Banbury, Bicester, Witney, Abingdon, Didcot, and Wantage and Grove. The types of waste that need to be planned for[32] are shown in Table 3, which sets out the 2012 baseline figures of waste produced in Oxfordshire that are used in the Plan. The Waste Needs Assessment provides more detail on the amount of waste that is currently managed and how much may need to be managed in future.

[31] OCC Waste Needs Assessment (2015) and review/update by BPP Consulting (February 2014).
[32] National Planning Practice Guidance for Waste, paragraph 013 (October 2014)

Table 3: Waste produced in Oxfordshire in 2012 (tonnes)

MSW	C&I	CDE	Hazardous	Agricultural	Waste Water	LLW
300,000	710,000	1,005,000	50,000	900,000	20,000	see table 11

Source:
MSW (Municipal Solid Waste) – Oxfordshire County Council (OCC)
C&I (Commercial and Industrial Waste) – BPP Consulting for OCC (estimate)
CDE (Construction, Demolition and Excavation Waste) – Oxfordshire County Council (estimate)
Hazardous waste – BPP Consulting for OCC
Agricultural waste – BPP Consulting for OCC (estimate)
Waste Water – Thames Water plc
LLW (Low Level Radioactive Waste)

5.5 Just over two thirds of the total waste produced in the county comprises municipal solid waste[33], commercial and industrial waste and construction, demolition and excavation waste. Collectively these are referred to as the principal waste streams and forecasts for each over the plan period are set out in Table 4. It is an aim of the plan for Oxfordshire to be net self-sufficient in managing and disposing of these wastes and forecasts are needed to plan for this. Agricultural waste makes up almost a third of total waste but most is managed on site (on individual farming units), much of it in ways that are outside normal planning control. This is not therefore included in the principal waste streams and is addressed separately in policy W8. The other types of waste are also important but the quantities to be managed are far lower and require specialist forms of management and disposal: these are addressed in policies W7 (hazardous waste), W9 (radioactive waste) and W10 (waste water).

5.6 Forecasts of waste produced in Oxfordshire are likely to change over time, as circumstances affecting the amount of waste produced change and new information becomes available. The forecasts are therefore not included in policy W1. Current (January 2015) forecasts are set out in Table 4. These will be kept under review and updated as necessary in the Oxfordshire Minerals and Waste Annual Monitoring Reports.

Table 4: Forecasts of amounts of principal waste streams to be managed – Oxfordshire waste arisings 2012 – 2031 (million tonnes)

	2012	2016	2021	2026	2031
MSW	0.300	0.320	0.343	0.360	0.376
C&I	0.710	0.736	0.758	0.766	0.773
CDE	1.005	1.220	1.483	1.483	1.483
Total	2.015	2.276	2.584	2.609	2.632

Source: Oxfordshire Waste Needs Assessment, OCC 2015

[33] Municipal Solid Waste is now increasingly referred to as Local Authority Collected Waste

5.7 Forecasts for municipal waste assume that from 2012 there is no increase in the amount of waste produced by each person each year[34]. Forecast growth in waste arisings therefore reflects only that which will result from the expected increase in population, taking into account both planned and assessed housing need[35].

5.8 The commercial and industrial waste forecast takes account of economic growth forecasts for Oxfordshire and Defra national forecasts[36]. A high growth rate has been used, based on a compound annual growth in waste arisings of 0.7% to 2021 and 0.2% thereafter. This results in an overall increase in arisings of some 9% between 2012 and 2031.

5.9 Future construction, demolition and excavation waste arisings will be largely governed by the rate of new building work. Forecasts also take account of policy, legislation and standards – all of which are pushing the sector to more sustainable waste management methods. Again, a high growth rate scenario has been used, but this has been partly checked by pressures to reduce waste. Steady growth in this waste stream is anticipated each year to 2021, based on an assumption that the rate of construction will increase as the economy picks up and house building increases in response to recently assessed demands[37]. An increase of 50% in this type of waste is possible, with waste levels stabilising thereafter.

5.10 Waste planning authorities are expected to develop plans that enable communities to take more responsibility for their own waste and which also allow waste to be disposed in one of the nearest available locations[38]. These principles underpin the aim for Oxfordshire to be net self-sufficient in the management (including disposal) of each of the principal waste streams. Some cross boundary movement of waste is inevitable but planning for net self-sufficiency should reduce the level of movement that is necessary[39].

5.11 For some time Oxfordshire has been receiving high levels of waste from other areas. A total of 670,000 tonnes of waste was imported into Oxfordshire in 2013, approximately 425,000 tonnes of which was disposed to landfill (see table 1 in section 2)[40]. This reflects the availability of landfill space in Oxfordshire[41], the relative proximity of a number of urban centres (e.g. Reading, Wokingham, Bracknell and Newbury) and a growing shortage of landfill capacity in other areas – in particular Berkshire and north Hampshire. London also has a shortage of landfill capacity and exports waste for disposal to other areas, including Oxfordshire (much of this waste arrives by rail). The

[34] Policy 3 of Oxfordshire Joint Municipal Waste Management Strategy 2013
[35] Oxfordshire Strategic Housing Market Assessment, GL Hearn, March 2014
[36] BPP Consulting Baseline, Forecasts & Targets for Commercial & Industrial Waste Generated in Oxfordshire, February 2014
[37] Oxfordshire Strategic Housing Market Assessment, GL Hearn, March 2014
[38] National Planning Policy for Waste (October 2014); this also expects that mixed municipal waste is recovered in line with the proximity principle
[39] Oxfordshire County Council and other Waste Planning Authorities in the South East of England have signed a Memorandum of Understanding that commits each to the aim of planning for net self-sufficiency
[40] Oxfordshire Waste Needs Assessment, OCC 2015
[41] All of Oxfordshire's landfills are permitted to take waste from outside the county, but in some cases there are restrictions on the areas from which waste can be imported

amount of waste from London is expected to reduce[42], but significant quantities of waste can still be anticipated from other areas as long as Oxfordshire's landfills continue to operate. Policy W1 sets the basis for managing waste produced in Oxfordshire. The approach to managing waste from other areas is covered by policy W6 (Landfill) and policy W3 (Provision for waste management capacity and facilities required).

5.12 **Policy W1: Oxfordshire waste to be managed**

Provision will be made for waste management facilities that allow Oxfordshire to be net self-sufficient in the management of its principal waste streams – municipal solid waste (or local authority collected waste), commercial and industrial waste, and construction, demolition and excavation waste – over the period to 2031.

The amounts of these wastes that need to be managed are as identified in the most recent Oxfordshire Waste Needs Assessment or update of these amounts in the Oxfordshire Minerals and Waste Annual Monitoring Reports.

Provision of facilities for hazardous waste, agricultural waste, radioactive waste and waste water/sewage sludge will be made in accordance with policies W7, W8, W9 and W10 respectively.

Diverting waste from landfill

5.13 The way that waste is managed has changed markedly in recent years. Most waste was previously disposed by landfill, but in Oxfordshire half is now understood to be recycled or recovered for other use. The recycling and recovery of municipal waste is leading this trend (58% in 2012/13)[43] and further improvement can be expected as a result of investment in new waste facilities.

5.14 This strategy seeks further improvement as quickly as is practical in the proportion of waste that is recycled, composted and recovered, to minimise the amounts of waste disposed in landfill. Policy W2 sets targets for the way in which the principal waste streams should be managed and these help to determine the provision that needs to be made for different types of waste management facilities (see policy W3).

5.15 The targets in this strategy have evolved from waste management targets in the former South East Plan. They have been modified and updated to reflect local circumstances in Oxfordshire, including the objectives and policies of the Oxfordshire Joint Municipal Waste Management Strategy 2013 (which aims to

[42] Waste from West London that was being disposed at Sutton Courtenay is now being disposed in South Gloucestershire. The London Plan expects the London Boroughs to become self-sufficient in managing their waste by 2025.
[43] Household waste recycling rates are published annually by each District Council (as Waste Collection Authority).

move waste management further up the waste hierarchy). The targets set by policy W2 reflect:

- higher recycling (and composting) targets that are considered achievable in Oxfordshire; and
- maximum diversion from landfill.

5.16 To encourage movement up the waste hierarchy, policy W2 requires that proposals for waste management facilities demonstrate that the waste could not be managed higher up the waste hierarchy than is being proposed. This is particularly with a view to avoiding an excess of capacity for the treatment of residual municipal waste and commercial and industrial waste that cannot be recovered by means of recycling, composting or treatment of food waste.

Municipal solid waste

5.17 Oxfordshire's municipal waste strategy[44] aims for recycling and composting of at least 65% of household waste by 2020 and at least 70% by 2025. Roughly half of the waste that is recycled is likely to be organic (green or food waste), reflecting the relative proportion of organic waste in this waste stream. Waste that is not recycled or composted (including treatment of food waste) will mostly be treated at the Ardley energy recovery facility, near Bicester. (This strategic facility is shown on the Waste Key Diagram). The residual waste treatment target otherwise recognises that a small amount of waste (5%) cannot be treated in this way and will still need to be sent to landfill [45].

Commercial and Industrial waste

5.18 As with municipal waste, much of the commercial and industrial waste stream can be recycled and other authorities' plans have set targets to achieve 70% recycling and composting over the next 10 to 15 years. Policy W2 sets separate targets for composting[46] and dry recycling, but the composting target is lower than that set for municipal waste, reflecting the lower food and green waste content of this waste stream[47]. This makes the achievement of a 70% recycling and composting target for commercial and industrial waste challenging.

Construction, Demolition and Excavation waste

5.19 The European Waste Framework Directive[48] requires 70% of construction and demolition waste to be recycled or recovered by 2020. Hard demolition waste makes up about a third of the overall waste stream and the vast majority (98%) is already processed and re-used as recycled aggregate. Construction waste is far more varied. Little more than a third is currently recycled and there may be some scope to improve on this.

[44] Oxfordshire Joint Municipal Waste Management Strategy 2013
[45] This does not include hazardous residues from waste treatment processes (policy W8)
[46] This includes food waste treatment
[47] About 10% of commercial and industrial waste recycled/composted will be food or green waste
[48] Directive 2008/98/EC on Waste (2008)

5.20 Naturally occurring excavation waste material is not subject to the Directive target. This may reflect the greater difficulty of recycling this type of waste, which largely comprises subsoil and amounts to about half of the overall waste stream. Excavation waste is nevertheless used (disposed or recovered) beneficially in Oxfordshire in the restoration of mineral workings and associated engineering works.

5.21 The former South East Plan set a recycling target of 60% for construction, demolition and excavation waste combined. In Oxfordshire about half of the overall waste stream (52%) is currently recycled and there is unlikely to be opportunity to significantly increase this. An overall recycling target of 60% is compliant with the Directive target for construction and demolition waste. This will be more readily monitored than would separate targets for construction and demolition waste and excavation waste.

5.22 **Policy W2: Oxfordshire waste management targets**

Provision will be made for capacity to manage the principal waste streams in a way that provides for the maximum diversion of waste from landfill, in line with the following targets:

Oxfordshire waste management targets 2012 – 2031

Waste Management / Waste Type	Target Year				
	2012	2016	2021	2026	2031
Municipal waste:					
Composting & food waste treatment	25%	29%	32%	35%	35%
Dry Recycling	33%	33%	33%	35%	35%
Treatment of residual waste	0%	30%	30%	25%	25%
Landfill	42%	8%	5%	5%	5%
Total	100%	100%	100%	100%	100%
Commercial and industrial waste:					
Composting & food waste treatment	0%	5%	5%	5%	5%
Dry Recycling,	50%	55%	60%	65%	65%
Treatment of residual waste	0%	15%	25%	25%	25%
Landfill	50%	25%	10%	5%	5%
Total	100%	100%	100%	100%	100%
Construction, demolition and excavation waste:					
Recycling	52%	55%	60%	60%	60%
Landfill/Restoration*	48%	45%	40%	40%	40%
Total	100%	100%	100%	100%	100%

Targets for 2012 approximate to actual performance for that year

*** includes waste disposed as part of a recovery operation**

Proposals for the management of all types of waste should demonstrate that the waste cannot reasonably be managed through a process that is higher up the waste hierarchy than that proposed.

Provision for waste management – capacity and facilities required

5.23 Table 5 shows how the forecast tonnages for the principal waste streams in policy W1 should be managed in order that the waste management targets in policy W2 can be met. Waste management capacity equivalent to these tonnages needs to be provided if Oxfordshire is to be net self-sufficient in meeting its waste needs (policy W1).

Table 5: Oxfordshire: estimated waste required to be managed 2012 – 2031 (tonnes per annum)

Waste Management / Waste Type	**Target Year**				
	2012	**2016**	**2021**	**2026**	**2031**
Municipal waste:					
Composting & food waste treatment	74,900	92,800	109,700	126,000	131,600
Dry Recycling	98,800	105,600	113,200	126,000	131,600
Treatment of residual waste	0	96,000	102,900	90,000	94,000
Landfill	125,900	25,600	17,200	18,000	18,800
Total	299,600	320,000	343,000	360,000	376,000
Commercial & industrial waste:					
Composting & food waste treatment	0	36,700	37,900	38,200	38,600
Dry Recycling,	355,000	404,700	454,800	497.600	502,500
Treatment of residual waste	0	110,400	189,500	191,400	193,300
Landfill	355,000	184,000	75,800	38,300	38,600
Total	710,000	735,800	758,000	765,500	773,000
Construction, demolition & excavation waste:					
Recycling	522,600	671,200	889,900	889,900	889,900
Landfill / Restoration	482,400	549,100	593,200	593,200	593,200
Total	1,005,000	1,220,300	1,483,100	1,483,100	1,483,100

Figures rounded to nearest 100 tonnes

Landfill totals do not include hazardous waste arising from residual waste treatment.

5.24 Existing waste management facilities will provide much of the waste management capacity required. Table 6 shows the capacity available: this reduces through the plan period as the capacity provided by temporary facilities is taken off in accordance with the end dates of their planning permissions.

Table 6: Oxfordshire – capacity available to manage waste at existing facilities 2012 – 2031 (tonnes per annum)

Facility type	2012	2016	2021	2026	2031
Non-hazardous waste recycling	591,900	590,500	421,500	421,500	309,400
Composting / food waste treatment	221,100	221,100	221,100	216,100	176,100
Non-hazardous residual waste treatment	300,000	300,000	300,000	300,000	300,000
Inert waste recycling	1,150,500	1,142,500	1,067,500	887,000	709,000

Source: Oxfordshire County Council
Municipal and Commercial and Industrial wastes are managed at non-hazardous waste facilities
Construction, Demolition and Excavation waste is managed at inert waste facilities

5.25 Table 7 shows when and for which types of facility a need is expected to arise for additional waste management capacity and the amount required. Shortfalls arise where the capacity provided by existing facilities (table 6) is insufficient to meet the estimated waste management capacity requirement (table 5). Policy W3 provides for these requirements to be monitored and kept up to date in the Minerals and Waste Annual Monitoring Reports.

Table 7: Oxfordshire – additional capacity required to manage the principal waste streams 2012 – 2031 (tonnes per annum)

Facility type	2012	2016	2021	2026	2031
Non-hazardous waste recycling	-	-	146,500	202,100	324,700
Composting / food waste treatment	-	-	-	-	6,100
Non-hazardous residual waste treatment	-	-	-	-	-
Inert waste recycling	-	-	-	2,000	180,900

Source: Oxfordshire County Council

5.26 For Oxfordshire to be net self-sufficient in managing its own waste, provision must be made for sites that are sufficient to enable the waste management requirements set out in table 5 to be met. Policy W4 provides for these capacity requirements to be met through the allocation of sites for waste management development in the Site Allocations Document, including in particular the provision that may need to be made for new sites to meet the shortfalls identified in table 7.

5.27 Sites already in use for waste management are likely to provide much of the waste management capacity required in the early part of the plan period. A need for additional commercial and industrial waste recycling facilities and for construction, demolition and excavation waste recycling facilities is likely to arise later in the plan period (table 7). Policy W3 sets out how the assessed need for waste management capacity should be taken into account in the consideration of proposals for waste management facilities.

5.28 Facilities for re-use, transfer, recycling, composting and treatment (of food waste) help move the management of waste up the waste hierarchy. These types of facilities should generally be encouraged, particularly having regard to the shortfall in recycling capacity that is expected to arise later in the plan period. Recycling and composting facilities may manage some waste from other areas at the same time as providing capacity that helps to meet Oxfordshire's waste management needs.

5.29 In the case of facilities for the treatment of residual waste, a more cautious approach should be taken. Residual waste treatment facilities come below recycling and composting in the waste hierarchy and no need has been identified for additional capacity in Oxfordshire within the plan period. These facilities are expensive to develop and tend to be large scale and would therefore be likely to draw waste into Oxfordshire from other areas. An excess of capacity for this type of facility is more likely to result in waste being 'disposed' further from its source, contrary to the proximity principle (see paragraph 2.28). An excess of residual waste treatment capacity could also impede the achievement of recycling and composting targets. These dis-benefits may be reduced if it becomes practical and economic to develop smaller scale facilities. If designed to serve a local need, particularly if linked to local provision of heat and power, smaller scale residual waste treatment facilities may be acceptable where they help to divert waste from landfill and it can be demonstrated that the they would not impede the achievement of recycling and composting targets.

5.30 **Policy W3: Provision for waste management capacity and facilities required**

Provision will be made through this policy and policies W4, W5 and W6 sufficient to meet the need for management of the principal waste streams identified in policy W1 and the waste management targets in policy W2, including any provision that needs to be made for additional waste management capacity that cannot be met by existing facilities.

Waste management capacity requirements will be kept under review and updated in the Oxfordshire Minerals and Waste Annual Monitoring Reports. The Minerals and Waste Annual Monitoring Reports will also set out how the waste management capacity requirements are expected to be met, including the capacity that is expected to be provided by:

- **Permanent and established waste management facilities;**
- **Time-limited waste management facilities;**
- **Sites with planning permission for waste management facilities that have not yet been built; and**
- **Sites allocated for waste development in the Minerals and Waste Local Plan: Part 2 – Site Allocations Document.**

Account will be taken of any requirements for additional waste management capacity (as identified in Table 7 or the most recent update in the Oxfordshire Minerals and Waste Annual Monitoring Reports) in the consideration of proposals for new waste management facilities for the principal waste streams.

Proposals for facilities for re-use, transfer and pre-treatment of waste (recycling, composting and treatment of food waste) will normally be permitted. Proposals for the treatment of residual waste will only be permitted if it can be demonstrated that the development would not impede the achievement of the waste management targets in policy W2 and that it would enable waste to be recovered at one of the nearest appropriate installations.

Proposals for disposal by landfill will be determined in accordance with policy W6.

General locational strategy for waste management facilities

5.31 Policy W4 provides the general strategy for the location of new waste facilities, as illustrated on the Key Waste Diagram (Figure 12). Unless otherwise specified (see policies W7, W8, W9 and W10) this policy applies to facilities managing the principal waste streams. The approach to landfill is dealt with separately in policy W6. Specific sites for waste management facilities will be allocated in the Site Allocations Document, taking into account the criteria in policy W5 (Siting of waste management facilities) and policies C1 – C11.

5.32 The general locational strategy looks to steer larger scale (strategic and non-strategic) facilities towards locations close to the main centres of population (as indicated on figure 2, in section 2) and for facilities in the more rural parts of the county to be of smaller scale. Table 8 provides a guide to differentiation between larger and smaller scale facilities[49].

[49] Other factors may also be relevant e.g. where there is clearly defined catchment area

Table 8: Guide to defining the scale of waste management facilities

Scale	Recycling/Treatment/Recovery Facilities throughput (tonnes per annum)		
	>50,000 tpa	<50,000 tpa	<20,000 tpa
Strategic	✓	x	x
Non-Strategic	x	✓	x
Small scale	x	x	✓

Source: Oxfordshire County Council

5.33 Strategic facilities are likely to serve the county as a whole, or at least large parts of it. Bicester, Oxford, Abingdon and Didcot (figure 2) are large centres of population linked by A34/M40. Bicester, Oxford and Didcot are expected to experience considerable growth and together with Abingdon will account for a very significant portion of the county's waste. Any strategic waste management facilities should normally be within 10 kilometres of Oxford City centre or 5 kilometres of the specified towns, but avoiding the Oxford Green Belt and North Wessex Downs Area of Outstanding Natural Beauty (see policies W5 and C8). Facilities in these locations will be close to large quantities of waste arisings, thereby avoiding the need for long distance movements by lorry. They can also benefit from the linkage provided by the A34/M40, which allows for movement of waste without directly impacting on local communities. Growth at Bicester, Oxford and Didcot may also bring forward site opportunities for new waste facilities. Locations further from these towns may also be suitable where there is good access to the Oxfordshire lorry route network (policy C10). Whilst Banbury is the second largest town in Oxfordshire, it is not included as a location for strategic waste management facilities because it is located in the north of the county, away from the main concentration of population and development, and it is not one of the key growth areas.

5.34 Non-strategic waste facilities are likely to serve an area equivalent to that of a district and should normally be located close to Oxford City or the larger towns: Abingdon, Bicester, Didcot, Banbury, Witney and Wantage & Grove(figure 2). Growth at these towns, particularly the key growth areas of Bicester, Oxford, Didcot and Wantage & Grove, may bring forward site opportunities for new waste facilities. Locations further from the large towns may also be suitable where there is good access to the Oxfordshire lorry route network (policy C10) or other benefits can be demonstrated (e.g. making good use of previously developed land). Locations in the Oxford Green Belt should be avoided (see policy W5). Non-strategic facilities are also unlikely to be compatible with the aims of planning in the Areas of Outstanding Natural Beauty (policy C8).

5.35 Large parts of the county are rural in character and relatively remote from the Oxfordshire Lorry Route Network and the main sources of waste arising. Much of the county comprises attractive countryside with small village communities. These rural areas are only likely to be suitable for small scale

waste facilities. Facilities of such scale are more likely to be in keeping with their surroundings, with traffic movement levels appropriate to rural roads. Where necessary, controls may be imposed on the volume of waste that can be handled at facilities, to ensure they remain small scale and do not have unacceptable impacts. Locations close to towns (figure 2) are more likely to reduce the distances waste needs to be transported, but other locations could be acceptable where the criteria in policy W5 and policies C1 – C11 are met.

5.36 The hierarchical nature of the strategy is illustrated in Table 9.

Table 9: Locations for different sizes of waste management facilities

Town	Strategic	Non-strategic	Small scale
Abingdon, Bicester, Didcot, Oxford	✓	✓	✓
Banbury, Witney, Wantage & Grove	x	✓	✓
Small Towns*	x	x	✓

Source: Oxfordshire County Council
* Carterton, Chipping Norton, Faringdon, Henley-on-Thames, Thame, Wallingford

5.37 One of the aims of the plan is to achieve a balanced distribution of waste management capacity across the county in relation to population and consequent waste arisings. Table 10 shows that with the exception of Oxford there is a reasonably well balanced distribution in the number of existing waste facilities between the districts, but that the distribution of the waste management capacity these facilities provide is less well balanced. This should be taken into account in making decisions on locations for facilities. In particular, any opportunities that arise to add to waste management capacity in Oxford should where possible be taken, although pressures for other forms of development suggest that Oxford is unlikely to be able to provide the balance of waste management capacity achieved in the other districts.

Table 10: Distribution of waste management capacity by District (2012)

Area	Population	Number of facilities	Waste Management Capacity		
			Tonnes per annum	Tonnes per head	Licensed landfill Cubic metres
Cherwell	142,359	25	1,055,500	7.4	4,163,176
Oxford	151,739	5	16,200	0.1	0
South	136,013	21	343,100	2.5	142,430
Vale	122,432	29	565,200	4.6	5,503,115
West	106,008	29	570,200	5.4	1,709,641
County	658,551	101	2,550,200	3.9	11,518,362

Source: Oxfordshire County Council Small Area Projections (Jan 2014)
Facility number and capacity figures do not include facilities with planning permission but not yet built

5.38 Policy W4 provides a locational framework for waste management facilities that reflects the needs and characteristics of different parts of the county, whilst also providing flexibility for the market to respond to waste management needs.

5.39 **Policy W4: Locations for facilities to manage the principal waste streams**

Facilities (other than landfill) to manage the principal waste streams should be located as follows:

a) Strategic waste management facilities should normally be located in or close to Bicester, Oxford, Abingdon and Didcot, as indicated on the Key Waste Diagram.

b) Non-strategic waste management facilities should normally be located in or close to Bicester, Oxford, Abingdon and Didcot and the other large towns (Banbury, Witney and Wantage & Grove), as indicated on the Key Waste Diagram.

c) Elsewhere in Oxfordshire, and particularly in more remote rural areas, facilities should only be small scale, in keeping with their surroundings.

Specific sites for waste management facilities (other than landfill) to meet the requirements set out in Policy W3 will be allocated in accordance with this locational strategy in the Minerals and Waste Local Plan: Part 2 – Site Allocations Document. The suitability of any new sites for allocation in the Site Allocations Document will be assessed against the criteria in policies W5 and C1 – C11.

Siting of waste management facilities

5.40 Policy W5 identifies a number of land uses that are likely to be suitable for waste management. This is not an exhaustive list but, equally, the suitability of a specific site proposal must also be assessed against the criteria in policies C1 – C11. These policies are designed to ensure that facilities do not endanger human health or cause unacceptable harm to the environment. Policy W4 will also help determine whether a site can accommodate a particular scale of activity.

5.41 The National Planning Policy Framework[50] encourages the reuse of previously developed land, and this core principle should be applied in any search for suitable sites. Finding sites for waste management can be difficult. Land already used for one type of waste management could well be suited to another, and this should always be explored[51]. The further development or

[50] National Planning Policy Framework – paragraph 17

[51] The Town and Country Planning (Use Classes) Order does not include a specific class for waste management and planning permission is normally required to change from one type of waste activity to another.

extension of an existing site may also offer a better option to the development of a new facility elsewhere.

5.42 There can be benefit (such as through operating synergies and reduced waste movements) in locating waste facilities at active mineral working or landfill sites. Such sites are usually already well provided for in terms of infrastructure. But mineral and landfill operations are normally subject to restoration requirements so additional facilities are more likely to be acceptable if they are temporary. Additional facilities may add to the impact of mineral working or landfill on a local community and this this should be taken into account[52].

5.43 Land already identified as suitable for employment (in particular B2 industrial) is likely to be suitable for many waste uses. Redundant agricultural buildings and associated land may also offer opportunity, but their rural location may limit the scale of development that is appropriate (see also policy W4). Land associated with waste water treatment plant may also provide potential for waste management. These sites are likely to be at a distance from housing and may be appropriate for composting and biological treatment.

5.44 Waste development should generally be avoided on green field land. Green field sites should only be considered where they can be shown to be the most suitable and sustainable option and where potential harm, particularly landscape impact, can be satisfactorily mitigated. Depending on the area of land involved, these considerations may also be relevant where the extension of an existing site onto green field land is proposed.

5.45 Where proposed waste management sites lie within or would affect an Area of Outstanding Natural Beauty, the proposal will be considered against policy C8. (See also paragraph 6.43 on siting of waste management facilities and AONBs.)

The Oxford Green Belt

5.46 Most proposals for waste management facilities are likely to be inappropriate in the Green Belt. The National Planning Policy Framework requires that substantial weight be given to any harm that is likely to be caused by development in the Green Belt. Development that is harmful to the Green Belt should only be approved in very special circumstances; and where the potential harm to the Green Belt is clearly outweighed by other planning considerations.

5.47 In the past, planning permissions have been granted for some waste development to take place in the Oxford Green Belt, recognising the difficulty of finding suitable sites in and close to Oxford[53]. Until recently national

[52] National Planning Policy for Waste (paragraph 5).
[53] For example, the site of a large grain silo at Gosford (near Kidlington) was permitted for the development of a materials recycling facility (although this land was subsequently acquired for essential rail expansion)

policy[54] allowed for "significant weight" to be given to the wider environmental and economic benefits of sustainable waste management when considering sites for waste development in the Green Belt. This is no longer the case. The National Planning Policy for Waste does, however, recognise that some types of waste management facilities may still have to be located in the Green Belt due to their particular locational needs[55].

5.48 Any proposal for inappropriate development in the Green Belt[56] must make clear why there are very special circumstances for it to be sited there, including why that type of facility needs to be located in the Green Belt. Consideration should be given to why other locations, in particular areas around Didcot and Bicester (policy W4) that are outside the Oxford Green Belt, do not provide suitable alternative options. If it is demonstrated that there are very special circumstances for development on land in the Green Belt, conditions are likely to be imposed to ensure that any waste facility only serves to meet a need that has been identified as forming part of the very special circumstances. These considerations apply equally to facilities that are intended to operate for a temporary period.

5.49 **Policy W5: Siting of waste management facilities**

Priority will be given to siting waste management facilities on land that:

- **is already in waste management or industrial use; or**
- **is previously developed, derelict or underused; or**
- **is at an active mineral working or landfill site; or**
- **involves existing agricultural buildings and their curtilages; or**
- **is at a waste water treatment works.**

Proposals for temporary facilities must provide for the satisfactory removal of the facility and restoration of the site at the end of its temporary period of operation, including at mineral working and landfill sites where the facility shall be removed on or before the cessation of the host activity. Temporary facility sites shall be restored in accordance with the requirements of policy M10 for restoration of mineral workings.

Waste management facilities will not be permitted on green field land unless this can be shown to be the most suitable and sustainable option for location of the facility.

Waste management development that is inappropriate in the Green Belt will not be permitted unless there are very special circumstances why it should be located in the Green Belt . Conditions may be imposed on any permission granted to ensure that the development only serves to meet a need that comprises or forms part of the very special circumstances.

[54] Planning Policy Statement 10 (withdrawn October 2014).
[55] National Planning Policy for Waste, paragraph 6 (October 2014) – an example might be a sewage treatment plant that needs to be close to the community it serves
[56] Small extensions or replacement buildings may be appropriate; also certain engineering operations and changes of use if they preserve openness and do not compromise the purpose of including land in the Green Belt (see National Planning Policy Framework).

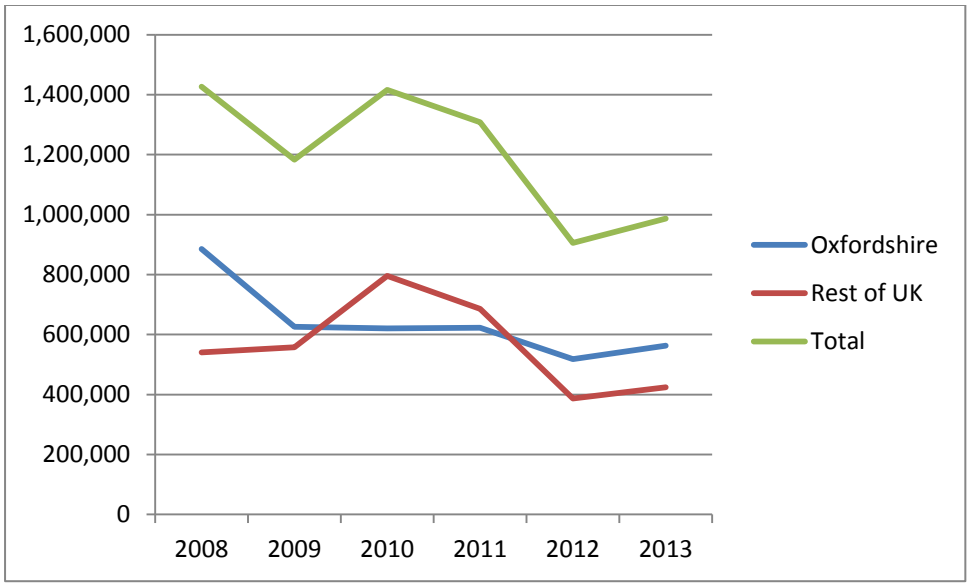
Proposals for new waste management facilities shall meet the criteria in policies C1 – C11.

Landfill

5.50 In terms of waste management, the disposal of waste in landfill is widely recognised as 'the option of last resort', reflecting its position at the bottom of the waste hierarchy. But some waste will continue to be disposed in this way, pending the development of new waste management infrastructure, and landfill facilities are important in helping waste to be disposed in one of the nearest appropriate installations[57]. There are several landfills operating in Oxfordshire and policy W6 provides the basis for considering proposals affecting their future operation as well as any proposals for further facilities. This policy is concerned with the disposal of non-hazardous and inert wastes: disposal of hazardous and radioactive waste in landfill is covered by policies W7 and W9 respectively.

5.51 In 2013 nearly a million tonnes of waste was disposed in Oxfordshire landfills. This was 30% less than the quantity landfilled in 2008, as shown in figures 10 and 11. In most years, more than half of the waste that is landfilled originates in Oxfordshire[58].

Figure 10: Origin of waste disposed in Oxfordshire licensed landfill sites 2008 – 2013 (tonnes)

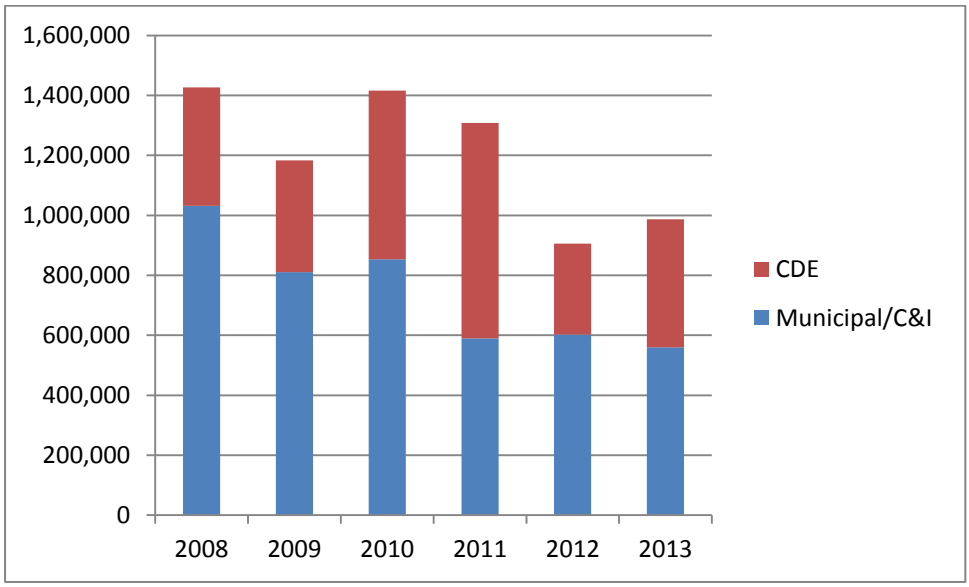


5.52 More non-hazardous waste is disposed in landfill than inert waste, but this balance is likely to change as inert waste arisings increase and a greater proportion

[57] This is the 'the proximity principle', which is a requirement of the European Waste Framework Directive (2008)
[58] This was not the case in 2010 and 2011 when a large amount of waste from the Olympic site was disposed in Oxfordshire.

of non-hazardous waste is recovered (as indicated in Table 5, paragraphs 5.55 – 5.56 and Table 12).

Figure 11: Types of waste disposed in Oxfordshire licensed landfill sites 2008 – 2013 (tonnes)



Non-hazardous waste

5.53 As recently as 2012, Oxfordshire had six non-hazardous landfill sites with capacity to dispose of more than 9.0 million tonnes of waste. Three of these sites are now expected to close before they are completely filled, and by 2016 only three sites are likely to remain in operation, as shown in table 11.

Table 11: Void remaining in Oxfordshire Non-hazardous landfill (Dec 2015)

Site Name	District	Permitted End Date	Actual / Expected End Date	Void (m3) (End 2015)
Finmere Quarry	Cherwell	2035	2035	639,086
Ardley Quarry	Cherwell	2019	2015	0
Alkerton Phase 3	Cherwell	2014	2012	0
Dix Pit	West Oxon	2030	2015	0
Slape Hill Quarry	West Oxon	2019	2019	147,000
Sutton Courtenay	Vale	2030	2030	3,526.185
Total Oxfordshire				4,312,271

Source: Environment Agency data for Dec 2013 extrapolated by Oxfordshire County Council.
1 tonne of non-hazardous waste = 1 cubic metre void
(The strategic landfills at Finmere Quarry and Sutton Courtenay are shown on the Waste Key Diagram)

5.54 In Oxfordshire recycling and composting rates are increasing and the Energy Recovery Facility at Ardley will significantly reduce the amount of residual waste that would otherwise be landfilled. As more waste treatment facilities are built in other areas[59] the decline that has already been seen in the quantity of waste coming into Oxfordshire from other areas should continue[60]. However, as landfill facilities close they are not being replaced and the declining quantity of waste that is landfilled is likely to have to be transported further to access those facilities that remain open. This makes it difficult to assess with any accuracy when Oxfordshire's remaining landfill void will be exhausted.

5.55 The targets in policy W2 are for the proportion of Oxfordshire's non-hazardous waste that is sent to landfill to reduce to no more than 5% of arisings by 2026. However, this reduction is likely to be partly off-set by an increase in landfilling of waste from parts of Berkshire, which has very little landfill remaining[61]. Municipal waste from West London was being landfilled at Sutton Courtenay but this waste is now being disposed in South Gloucestershire on a long-term basis. The London Plan expects the London Boroughs to become self-sufficient in managing their waste by 2025, but this may take longer to achieve in practice and it is possible that other waste from London will be disposed to landfill in Oxfordshire.

5.56 The remaining landfills will have insufficient capacity to accept waste at their current rates for the full duration of the plan period. There is, however, more than enough capacity to accommodate Oxfordshire's forecast disposal needs and the forecast municipal waste from the Central Berkshire Unitary Authorities of Reading, Wokingham and Bracknell Forest. As shown in Table 12, after meeting these needs, Oxfordshire's remaining landfills would still have capacity remaining totalling nearly 1.7 million m3. This would be sufficient for the disposal just over a further 100,000 tonnes of waste on average each year from 2016 to 2031 (16 years). This is about the same as the amount of waste currently received from other areas (i.e. other than Oxfordshire and Central Berkshire).

[59] For example, a large energy from waste facility is currently under construction at Calvert Landfill in Buckinghamshire, close to the boundary with Oxfordshire

[60] A 2011 Briefing Report 'The Future of Landfill?' by Tolvik Consulting forecast a 45% reduction in waste going to landfill in the next 10 years

[61] Reading, Wokingham and Bracknell Forest Unitary Authorities have a long-term contract with the operator of Sutton Courtenay landfill for the disposal of increasing amounts of municipal waste throughout the plan period

Table 12: Landfill capacity remaining after Oxfordshire and Central Berkshire[62] needs have been met (cubic metres)

Year or Period	2015	2016	2017 – 2021	2022 – 2026	2027 – 2031
Forecast landfill of waste from Oxfordshire and Central Berkshire (tonnes)		249,073	1,176,589	696,616	507,767
Capacity remaining (m3) at end of year or period	4,300,000 (estimate)	4,050,927	2,874,338	2,177,722	1,669.955

Source: Oxfordshire County Council
1 tonne of waste = 1 cubic metre void

5.57 On this basis, no provision needs to be made for further non-hazardous landfill. To do so would also not be consistent with the Plan's aim of driving the management of waste up the waste hierarchy. Oxfordshire County Council will continue to co-operate with other authorities in considering the role that any remaining landfill void in Oxfordshire might play in meeting their waste management needs.

5.58 Policy W6 sets out how the remaining landfill void should be managed. In accordance with policy M10, landfill sites should be restored as soon as possible, but proposals seeking to extend the operation of non-hazardous landfills beyond a permitted closure date may be justified where this would make best use of the remaining resource. Proposals to extend the life of an existing landfill should identify the revised rate and duration of infill and demonstrate any steps that are being taken to secure restoration of the site as soon as possible. The former South East Plan sought to safeguard (or husband) all unused non-hazardous landfill for future use, but it is now clear that a more flexible and practical approach to landfill management is required. There are important commercial as well as environmental considerations in deciding whether a landfill should be closed prematurely or mothballed for future use, and policy W6 provides flexibility for proposals[63] to be considered on their individual merits.

5.59 The Landfill Directive requires that landfill sites taking biodegradable waste incorporate measures to capture the gas they produce and preferably utilise this for energy recovery. Landfill sites also produce leachate and discharges to watercourses and groundwater that need to be controlled. Provisions and facilities for gas capture and leachate facilities will be required beyond the

[62] Reading, Wokingham and Bracknell Forest municipal waste disposal requirements
[63] In the case of early closure, proposals for amended restoration profiles will need to be approved. In the case of mothballing, proposals to extend the lifetime of the facility are likely to be needed

operational life of the landfill and policy W6 makes provision for this where consistent with other regulatory requirements.

5.60 There has been speculation[64] that excavation of old landfills for the recovery of material and/or energy resources from waste may become commercially attractive in future years. Any proposals for such development are likely to raise concerns about public health and environmental impact. Any benefits in terms of waste recovery will need to be weighed against these concerns and this may call for proposals to be considered in tandem with an application for an Environmental Permit (see also Core Policy C5 and paragraph 6.25.

Inert waste

5.61 In 2013 there were ten licensed inert waste 'disposal'[65] facilities operating in Oxfordshire with a collective void space of some 4.2 million cubic metres. Three other facilities were not operating and several new facilities are expected to open as a result of recent planning decisions. Over the life time of the plan there is already potential opportunity to 'dispose' of some 370,000 – 590,000 tonnes of waste each year, as shown in table 13.

Table 13: Capacity available for disposal of inert waste 2013 – 2031 (units as specified)

	Available void (m3)	Cumulative available void (m3)	Cumulative waste disposal capacity (tonnes pa)
Operational facilities	4,200,000	4,200,000	370,000
Non-operational facilities	300,000	4,500,000	397,000
Permissions not yet implemented	2,500,000	7,000,000	590,000

Source: Oxfordshire County Council
1.5 tonnes of inert waste = 1 cubic metre void

5.62 Much of the existing capacity is provided by two large facilities. Shellingford Quarry (Vale of White Horse) has permission to operate until 2028; and Shipton-on-Cherwell Quarry has permission to operate until 2025. The existing and permitted sites should provide sufficient capacity for the 'disposal' of Oxfordshire's forecast waste (593,000 tonnes per annum)[66] at least until 2025.

5.63 The Site Allocations Document will make provision for any further sites that are needed for the plan period. A number of options have been put forward by

[64] A 'tip mining' operation was expected to commence in Belgium in 2014
[65] The use of inert waste for the restoration of spent mineral workings can be defined as a 'recovery' operation (as distinct from a landfill disposal operation).
[66] Further information is provided in the Oxfordshire Waste Needs Assessment 2015

waste and mineral operators for the use of inert waste to restore worked out quarries. In addition, new quarries and extensions to existing quarries which involve infilling with inert waste to achieve restoration are expected to come into operation during the life-time of the plan (through implementation of the plan's minerals strategy). It is unlikely that there will not be sufficient reasonable options to provide for the disposal of residual inert waste arisings; rather, it is more likely that there will be a shortage of this type of waste to achieve satisfactory restoration of worked out quarries (see also policy M10). Policy W6 therefore provides for priority to be given to the use of residual inert waste in the restoration of quarries. Otherwise, proposals for disposal of inert waste on land should demonstrate that there is a positive environmental benefit and that there will be no adverse landscape impact.

5.64 The wider availability of inert waste disposal sites and the costs involved in transporting this type of waste by road limits the amount of inert waste brought to Oxfordshire from other areas for disposal[67]. However, the county may be seen as a suitable location for the disposal of surplus inert waste from future large scale engineering projects such as the Thames Tideway Tunnel in London and HS2, particularly if there is potential for moving the waste by rail[68]. Such waste could make a useful contribution to the restoration of the county's exhausted mineral workings. Policy C10 would encourage the transport of such material by rail.

5.65 **Policy W6: Landfill**

Non-hazardous waste disposal facilities

Provision for disposal of Oxfordshire's non-hazardous waste will be made at existing non-hazardous landfill facilities which will also provide for the disposal of waste from other areas (including London and Berkshire) as necessary. Further provision for the disposal of non-hazardous waste by means of landfill will not be made.

Permission may be granted to extend the life of existing non-hazardous landfill sites to allow for the continued disposal of residual non-hazardous waste to meet a recognised need and where this will allow for the satisfactory restoration of the landfill in accordance with a previously approved scheme.

Permission will be granted for facilities for the management of landfill gas and leachate where required to fulfil a regulatory requirement or to achieve overall environmental benefit, including facilities for the recovery of energy from landfill gas. Provision should be made for the removal of the facilities and restoration of the site at the end of the period of management.

[67] Of the 427,000 tonnes of inert waste 'disposed' in 2013, three quarters originated in Oxfordshire

[68] In 2010 and 2011 over 600,000 tonnes of inert waste was received from London; it is understood that most of this came from the construction of the Olympics site and was transported by rail

Inert waste disposal facilities

Provision for the disposal of inert waste which cannot be recycled will be made at existing facilities and in sites that will be allocated in the Minerals and Waste Local Plan: Part 2 – Site Allocations Document. Provision will be made for sites with capacity sufficient for Oxfordshire to be net-self-sufficient in the management and disposal of inert waste.

Priority will be given to the use of inert waste that cannot be recycled as infill material to achieve the satisfactory restoration and after use of active or unrestored quarries. Permission will not otherwise be granted for development that involves the disposal of inert waste on land unless there would be overall environmental benefit.

General

Proposals for landfill sites shall meet the criteria in policies C1 – C11.

Landfill sites shall be restored in accordance with the requirements of policy M10 for restoration of mineral workings.

Hazardous waste

5.66 This waste stream includes a variety of wastes and most require treatment or disposal at specialist facilities; these can be expensive to develop and operate. Hazardous waste facilities often serve an area much wider than a single county and it is acknowledged that these wastes, though often small in volume or low in weight, are generally transported longer distances than other types of waste.

5.67 Oxfordshire is a net exporter of hazardous waste. In 2012, 52,000 tonnes of hazardous waste was produced but only 31,000 tonnes was managed in the county. Much of the waste was treated or recovered, with some 6,000 tonnes being disposed in landfill or by incineration. Hazardous waste facilities in Oxfordshire generally manage smaller tonnages than those handling other wastes but some, in particular a transfer and recycling facility near Ewelme in South Oxfordshire, manage waste from a very wide area. There nearest hazardous waste landfills are at Swindon, Cheltenham and in East Northamptonshire (which is also permitted to accept very low level radioactive waste). The nearest hazardous waste incinerators are at Slough and Fawley (Southampton).

5.68 The amount of hazardous waste produced in Oxfordshire is likely to increase over the plan period, as shown in table 14. This includes oil based residues which currently make up about 20% of this waste stream. The Ardley energy recovery facility will produce hazardous residues that will need to be disposed at a specialist facility European legislation is also likely to bring more waste into the hazardous waste category.

Table 14: Oxfordshire Hazardous Waste arisings 2012 – 2031 (tonnes)

2012	2016	2021	2026	2031
52,000	58,750	65,500	72,250	79,000

Source: BPP Consulting for Oxfordshire County Council (February 2014)

5.69 For Oxfordshire to be net self-sufficient in the management and disposal of these wastes, facilities capable of managing and disposing of a further 45,000 – 50,000 tonnes of waste per annum would be required. It would not be practicable to provide for a sufficient range of facilities for an area the size of Oxfordshire to be net self-sufficient in managing these varied wastes. Policy W7 generally allows for the development of further facilities but does not aim to provide for particular facility types or levels of capacity.

5.70 The Strategy for Hazardous Waste Management in England identifies a need for certain types of specialist facilities, as did the former South East Plan, and the following types of facility may be relevant to Oxfordshire:

- treatment for air pollution control residues (from combustion plants);
- recycling of waste electronic equipment;
- treatment of contaminated construction, demolition and excavation waste;
- treatment of oily wastes/sludges;
- hazardous waste landfill.

5.71 Some non-hazardous landfills may be suitable to be adapted for disposal of hazardous waste. No such proposals have come forward in Oxfordshire but the availability of disposal facilities in other nearby counties is limited and their capacity will reduce over the plan period. Policy W7 provides flexibility for the market to respond to changing needs should they arise.

5.72 Proposals for the management of hazardous waste should also have regard to policies W4 (general locations) and W5 (specific locations) and polices C1 – C11.

5.73 **Policy W7: Management and disposal of hazardous waste**

Permission will be granted for facilities for the management and disposal of hazardous waste where they are designed to manage waste produced in Oxfordshire. Facilities that are likely to serve a wider area should demonstrate that they will meet a need for waste management that is not adequately provided for elsewhere.

Proposals for new waste management facilities shall meet the criteria in policies W4, W5 and C1 – C11.

Agricultural Waste

5.74 Oxfordshire farms generate about 900,000 tonnes of waste each year and this is unlikely to alter greatly over the plan period. The majority of this waste (98%) is of organic and is likely to be managed within the unit of production. The small amount of non-organic waste is likely to be managed at facilities handling commercial and industrial and hazardous wastes.

5.75 The spreading of agricultural waste on agricultural land benefits agricultural production and is not subject to planning control. Buildings and other development associated with agriculture may require planning permission but in many cases this is permitted by general order[69] (permitted development). Where applications for planning permission are required they are normally considered by the District Council as local planning authority but where waste is involved, depending on the nature of the development or the source of the waste, they may fall to be determined by the County Council as waste planning authority. Applications for plant, buildings or facilities taking waste from outside the agricultural unit would be dealt with by the County Council.

5.76 Policy W8 allows for the construction of facilities for the management of agricultural waste provided they comply with policies C1 – C11. Treatment of agricultural waste by processes such as anaerobic digestion offer opportunity to generate energy from waste and the possibility of recovering heat for use locally and this is encouraged. Intensive livestock units offer such opportunities where already located away from housing and benefiting from good access. Attention should be paid to the impact of development on the local landscape, particularly if situated within, or close to, an Area of Outstanding Natural Beauty.

5.77 Facilities treating organic farm waste may take agricultural waste feedstock from other farms. Policy W3 (in addition to policy W8) may apply to proposals that rely on feedstock from other waste streams, depending on the amount of non-agricultural waste involved. Organic agricultural waste may alternatively be used as a feedstock for a waste treatment facility located other than on an agricultural unit and such proposals should be considered in accordance with policies W4 and W5

5.78 **Policy W8: Management of agricultural waste**

Proposals for the treatment of agricultural waste within a unit of agricultural production will normally be acceptable; and such proposals will be encouraged to provide for the generation of energy from this waste or heat for local use.

Proposals that are designed to treat agricultural waste in conjunction with other wastes at facilities not located on an agricultural unit will be assessed in accordance with policies W4 and W5.

[69] The Town and Country Planning General (Permitted Development) Order

Provision for the management of non-organic agricultural waste will be made at facilities designed to manage inert, non-hazardous and hazardous wastes in accordance with policies W3 and W7.

All proposals shall meet the criteria in policies C1 – C11.

Radioactive waste

5.79 Low Level (LLW), Intermediate Level (ILW) and High Level (HLW) radioactive waste is classified according to the level of radiation and the heat produced during decay. Radioactive waste arises from both nuclear and non-nuclear activities. Naturally occurring radioactive material (NORM) is also produced from some industrial processes, including drilling for oil and gas.

5.80 In Oxfordshire, low level and intermediate level wastes arise from the former nuclear energy research facility at Harwell, in Vale of White Horse District, and the Joint European Taurus (JET) facility at Culham, in South Oxfordshire District. Most of this waste will be from the decommissioning of facilities, as detailed in table 13.

Table 15: Forecast arisings of Intermediate and Low Level Radioactive Waste from Harwell and Culham as a result of decommissioning activity (tonnes)

	Waste in Store		Waste in Store + future arisings (packaged volume)	
	As at 2010	As at 2013	As at 2010	As at 2013
Culham				
ILW	30	62	817	825
LLW	600	220	8,100	7,160
Harwell				
ILW	2,130	2,300	6,870	6,600
LLW	2,820	1,240	99,600	39,800

Source: Nuclear Decommissioning Authority UK Radioactive Waste Inventories 2010 and 2013
Future arisings as assessed in 2013 are for the period to 2020 only

5.81 Small amounts of radioactive waste are produced from non-nuclear activities, including the medical, educational and manufacturing sectors. Most of this will be of such low activity that it will be exempt from radiological permitting and able to be disposed at conventional facilities. Facilities at Harwell may help manage waste that cannot be disposed in this way, prior to disposal elsewhere.

5.82 The disposal network for radioactive waste has been described as 'fragile' and, in some parts of the country, 'non-existent'[70]. The government therefore

[70] UK Strategy for the Management of Solid Low Level Radioactive Waste from the Nuclear Industry (2010)

expects existing disposal routes to be conserved and other routes developed or strengthened where possible. The main disposal route for many wastes is the Low Level Waste Repository (LLWR) near Drigg in Cumbria, but lower activity radioactive wastes can be disposed by way of incineration or at licensed landfill[71], allowing the LLWR to be used more effectively. Higher level wastes will eventually be disposed in a national facility and in the meantime need to be stored safely[72].

5.83 Facilities to manage radioactive waste are highly specialised and expensive to develop and in Oxfordshire these are confined to the Harwell and Culham sites. Proposals for the management of radioactive waste are unlikely to come forward at locations other than Harwell or Culham and specific provision for development of facilities at these sites is made in policy W9 and shown in the Waste Key Diagram. There are no disposal routes in the county and any proposals that may come forward must be considered in line with national policy. Any such proposal is likely to benefit the management of radioactive waste produced in Oxfordshire and policy W9 makes provision for this. Unless defined as a national infrastructure project[73] the County Council would deal with any planning application for the management or disposal of radioactive waste.

Harwell

5.84 The former nuclear energy research facility at Harwell includes an area designated[74] as a nuclear licensed site. The 'licensed area' at Harwell is being progressively decommissioned with a view to its redevelopment as part of the Harwell Oxford Campus. The decommissioning programme provides for the treatment and storage of the legacy radioactive wastes that remain from earlier research activity and this will continue throughout the lifetime of the plan. Part of the Harwell Oxford Campus is within the recently designated Science Vale Enterprise Zone. The site is also within the North Wessex Downs Area of Outstanding Natural Beauty.

5.85 Facilities for the treatment and long term storage of intermediate level radioactive waste have already been developed and a new store will be available in 2017[75]. The site operator has not identified a need for further facilities to manage intermediate level radioactive waste[76] but policy W9 makes provision for such development if necessary. Development to facilitate

[71] The nearest incinerator capable of taking Oxfordshire radioactive waste is at Fawley, near Southampton; of three landfills licensed to accept lower activity waste nationally, the nearest is in East Northamptonshire
[72] A site for a deep geological repository has not yet been identified and is unlikely to be available before the end of the plan period
[73] National Strategic Infrastructure Projects are considered by the Planning Inspectorate and determined by the Secretary of State
[74] Nuclear licensed sites are controlled by the Office of Nuclear Regulation with involvement from other organisations, including the Environment Agency
[75] The facility has planning permission; it will accommodate intermediate level waste from Culham and Winfrith in Dorset, but the Nuclear Decommissioning Authority has also agreed that some types of waste will transfer from Harwell to be treated and stored at Sellafield in Cumbria
[76] In November 2013 the Nuclear Decommissioning Authority consulted on proposals for the consolidation of storage facilities for legacy nuclear waste; this did not envisage a wider role for Harwell beyond that already provided for in the recently approved ILW store

the storage or management of ILW other than that produced in Oxfordshire should demonstrate that it is the best option in terms of sustainability and environmental considerations.

5.86 Much of the legacy waste will be from demolition and clearance of buildings and ground work and will be of low level radioactivity. Some will have to be disposed at the Low Level Waste Repository (or possibly at the proposed national deep geological repository) but most is likely to be classified as either very low level waste or high volume low activity (HVLA) waste that can be disposed in a suitable landfill. There may be a need for further storage facilities for this waste. Suitable disposal routes need to be identified.

5.87 The nearest disposal facility is currently in East Northamptonshire[77] and some waste from Harwell is already being taken there. This facility has permission to operate to 2027 but Harwell may be generating waste for disposal beyond this date. Alternative provision for disposal may therefore need to be made. Studies of the best practical environmental options for disposal of lower activity radioactive waste have been undertaken[78] and three credible options were identified. The initial conclusion was that on-site disposal was preferred but this was later revised to favour disposal in an off-site facility.

5.88 The Nuclear Decommissioning Authority advises that local circumstances should dictate whether disposal is better undertaken in a bespoke on-site facility or at a commercial facility elsewhere. Sustainability appraisal undertaken during the preparation the Plan[79] gave some support to on-site disposal, because of the transportation impacts that would arise from disposal elsewhere, but disposal of waste off site is more compatible with the site's envisaged end state and is preferred by the site operator. Policy W9 therefore provides for the on-site disposal of waste but only if no other disposal route is available. Application would also need to be made to the Environment Agency for a disposal licence, as part of which 'Best Available Technique' would need to be demonstrated.

Culham

5.89 The Culham Science Centre hosts and operates the Joint European Taurus (JET) project in building J1. Support buildings include a small facility for the treatment and storage of radioactive waste. Some buildings associated with JET will be retained when the project ceases, but others are subject to temporary permission and some radioactive waste will result when decommissioning takes place. The United Kingdom Atomic Energy Authority's view is that, consistent with policies in the adopted South Oxfordshire Core Strategy, the JET site could continue to host further activity. This is not yet

[77] The East Northamptonshire Resource Facility is operated by Augean Ltd: there are no restrictions which would preclude the small amounts of VLLW arising from the non-nuclear sector being disposed in this facility
[78] The HVLA Waste Public Consultation at UKAEA Harwell (Update No.1) and the HVLA Waste Public Consultation at RSRL Harwell (Update No.3)
[79] Sustainability Appraisal incorporating Strategic Environmental Assessment of the Pre Submission Minerals and Waste Core Strategy Sustainability Appraisal Report (March 2012) prepared by URS for the County Council

confirmed and so the possible need to manage radioactive wastes from decommissioning must be anticipated.

5.90 Recent changes to the Environmental Permitting Regulations have reduced the need (and therefore volume) for some waste produced at Culham to be categorised as radioactive waste. For waste categorised as radioactive the small waste management facility at Culham is not seen as a long term solution for treatment or storage. Policy W9 therefore makes provision for storage at Harwell of intermediate level waste arising at Culham. For low level radioactive waste arising from decommissioning, the site operator has not yet identified a disposal route and provision needs to be made for this in the plan.

5.91 Disposal of lower activity waste at Culham would conflict with the United Kingdom Atomic Energy Authority's vision for the site, set out in a recently developed master plan. The site operator also believes that economic and environmental considerations are likely to result in such waste being stored or disposed off-site. However, because of the uncertainties around the disposal of this type of waste, the option of on-site disposal cannot be discounted and so policy W9 makes provision for this if necessary. Culham is in the Green Belt where inappropriate development should only be allowed if there are very special circumstances (policy W5). Application would also need to be made to the Environment Agency for a disposal licence, as part of which, 'Best Available Technique' would need to be demonstrated.

5.92 **Policy W9: Management and disposal of radioactive waste**

Permission will be granted for proposals for the management or disposal of low level radioactive waste where it is demonstrated that a significant contribution could be made to the management or disposal of waste produced in Oxfordshire. Proposals that provide for the needs of a wider area should demonstrate they would meet a need for waste management that is not adequately provided for elsewhere.

The Minerals and Waste Local Plan: Part 2 – Site Allocations Document will allocate sites to make specific provision for:

- **the treatment and storage of Oxfordshire's intermediate level legacy radioactive waste at Harwell Oxford Campus, pending its disposal at a national disposal facility;**
- **the treatment and storage of low level legacy radioactive waste at Harwell Oxford Campus and Culham Science Centre pending its eventual disposal; and**
- **the disposal of low level radioactive waste at bespoke facilities at Harwell Oxford Campus or at Culham Science Centre if this is demonstrated to be the most sustainable option for disposal of this waste.**

All proposals shall meet the criteria in policies C1 – C11.

Waste water (sewage)

5.93 Thames Water plc operates strategic waste water (sewage) treatment works (STWs) at Banbury, Bicester, Oxford, Witney, Didcot and Wantage/Grove. Local treatment works serving smaller catchments feed into the STWs which treat raw sludge before recycling it to agricultural land. Three of the STWs (Oxford, Banbury and Didcot) already recover energy from these processes, and additional plant has recently been installed at Oxford STW to enable a greater volume of sludge to be treated, recover more energy from that sludge and reduce the volume of treated sludge for recycling to agricultural land.

5.94 Thames Water's 25-year Sludge Strategy (December 2008) identified a need to improve treatment processes at the STWs in response to growing waste volumes and changes to the way treated sludge is applied to agricultural land. As a result of work already undertaken, Thames Water now anticipates that the function of Witney, Wantage and Bicester STWs will change to only produce raw sludge cake that will be transported to Oxford STW for treatment and energy recovery. An increase in the amount of waste to be disposed was anticipated but this forecast has now been revised.

Table 16: Sewage Sludge produced in Oxfordshire and requiring disposal (tonnes dry solids)

Sewage Sludge Arisings 2012	Sludge Strategy forecast 2030	Revised forecast 2041
20,000	25,000	16,500

5.95 Planning applications for waste water treatment development are decided by the CountyCcouncil as waste planning authority in consultation with the District Council as local planning authority. The Sludge Strategy did not envisage a need for additional strategic sites in Oxfordshire, but the Plan looks beyond the period covered by the Sludge Strategy and levels of growth are likely to be greater than envisaged when that Strategy was produced. The Plan therefore makes provision for such infrastructure – strategic or otherwise – where that may be needed to facilitate new housing or other development being planned by the district councils. Policy W10 provides for the improvement of existing facilities and the development of other facilities where necessary.

5.96 This type of development has the potential to impact on the environment, in particular landscape and general amenity. Allowing waste water development to take place on green field land (contrary to the general presumption in policy W5) allows for it to be sited away from settlements, at a distance from local housing. Development in such locations should still be capable of meeting the requirements of policies C1 – C11. Where this is not the case, compelling arguments would be needed to allow the development to proceed. Particular considerations apply in the Green Belt and the Areas of Outstanding Natural Beauty (see policies W5 and C8).

5.97 **Policy W10: Management and disposal of waste water and sewage sludge**

Permission will be granted for proposals for the treatment and disposal of waste water and sewage sludge where they are:

- **in the interests of long term waste water management; or**
- **to improve operational efficiency; or**
- **to enable planned development to be taken forward.**

Proposals should accord with policies C1 – C11 and will otherwise only be considered favourably if there is an over-riding need that cannot be met in a more suitable location and provided that any adverse environmental impact is minimised.

Safeguarding waste management sites

5.98 Waste management facilities are often seen as 'bad neighbours' and it can be difficult to find sites on which facilities can be developed. In Oxfordshire this is compounded by the high value of development land and competition from more profitable forms of development, particularly in and around Oxford.

5.99 National planning policy[80] is for existing, planned and potential sites for the handling, processing and distribution of substitute, recycled and secondary aggregate material to be safeguarded though local plans. The National Planning Policy for Waste[81] expects the capacity provided by existing operational waste facilities to be taken into account when considering how future waste needs should be met. The acknowledged difficulty of finding sites suitable for waste management in Oxfordshire adds further weight to the need to safeguard sites that are already used, or have permission to be used, for waste management.

5.100 Safeguarding existing and permitted waste management sites will help to:

- prevent the loss of waste capacity to other forms of development;
- keep options available for developing additional capacity; and
- reduce the need to find new sites for waste uses.

Pending the adoption of the Site Allocations Document, policy W11 safeguards all sites that contribute, or have permission to contribute, to Oxfordshire's waste management capacity. This applies to all waste management facilities except landfill (to which policy W6 applies).

5.101 Sites that are safeguarded are listed in Appendix 2 and their locations are shown on maps 5 and 6. The Site Allocations Document will confirm whether or not safeguarding will apply to each site for the duration of the plan[82]. Policy W11 sets out the types of site that will be safeguarded. Sites that are

[80] National Planning Policy Framework, paragraph 143 (March 2012)
[81] National Planning Policy for Waste, paragraph 3 (October 2014)
[82] Further details are set out in the Waste Site Safeguarding Topic Paper

allocated for waste management development in the Site Allocations Document under policy W4 will also be safeguarded.

5.102 Policy W11 provides that there should be a presumption against development that could compromise the future use of a safeguarded site for waste purposes. Other forms of development should only be permitted if a suitable alternative location for the waste use can be identified, secured and safeguarded. A site may otherwise be released from safeguarding if it is established (normally through the consideration of a planning application) that there is no further need for a waste management use or that the use should be relocated in the interests of the proper planning of the area.

5.103 Pending the adoption of the Site Allocations Document the District Councils will consult the County Council (as Waste Planning Authority) on all planning applications for non-waste development that are proposed on a safeguarded site, thereby ensuring that any waste planning issues can be properly taken into account. The District Councils will also consult the County Council on proposals for development close to a safeguarded site to allow consideration to be given to whether it may be incompatible with or prejudicial to current or future waste use of the safeguarded site. The Site Allocations Document will confirm where consultation may not be necessary, but pending the adoption of that Document a consultation zone of 250 metres will be applied to all safeguarded sites[83].

5.104 A list of safeguarded sites will be included in future Minerals and Waste Annual Monitoring Reports This will include any new sites that are permitted or become operational in the intervening period, and will also identify any sites that have closed.

5.105 **Policy W11: Safeguarding waste management sites**

The Minerals and Waste Local Plan: Part 2 – Site Allocations Document will identify sites that will be safeguarded for waste use for the duration of the plan period, comprising:

- **sites in waste use and with planning permission allowing the use to continue for the remainder of the plan period;**
- **sites with planning permission for waste use but where the use or development permitted has not yet been undertaken;**
- **vacant sites last used for waste purposes; and**
- **sites allocated for waste management development in the Site Allocations Document.**

Pending the adoption of the Site Allocations Document existing and permitted waste management sites (as specified in Appendix 2) are safeguarded for future waste management use.

[83] The adopted East Sussex Waste Minerals Plan (February 2013) applies a consultation zone of 250 metres around all waste sites

The list of sites safeguarded for future waste management use will be monitored and kept up to date in the Minerals and Waste Annual Monitoring Report.

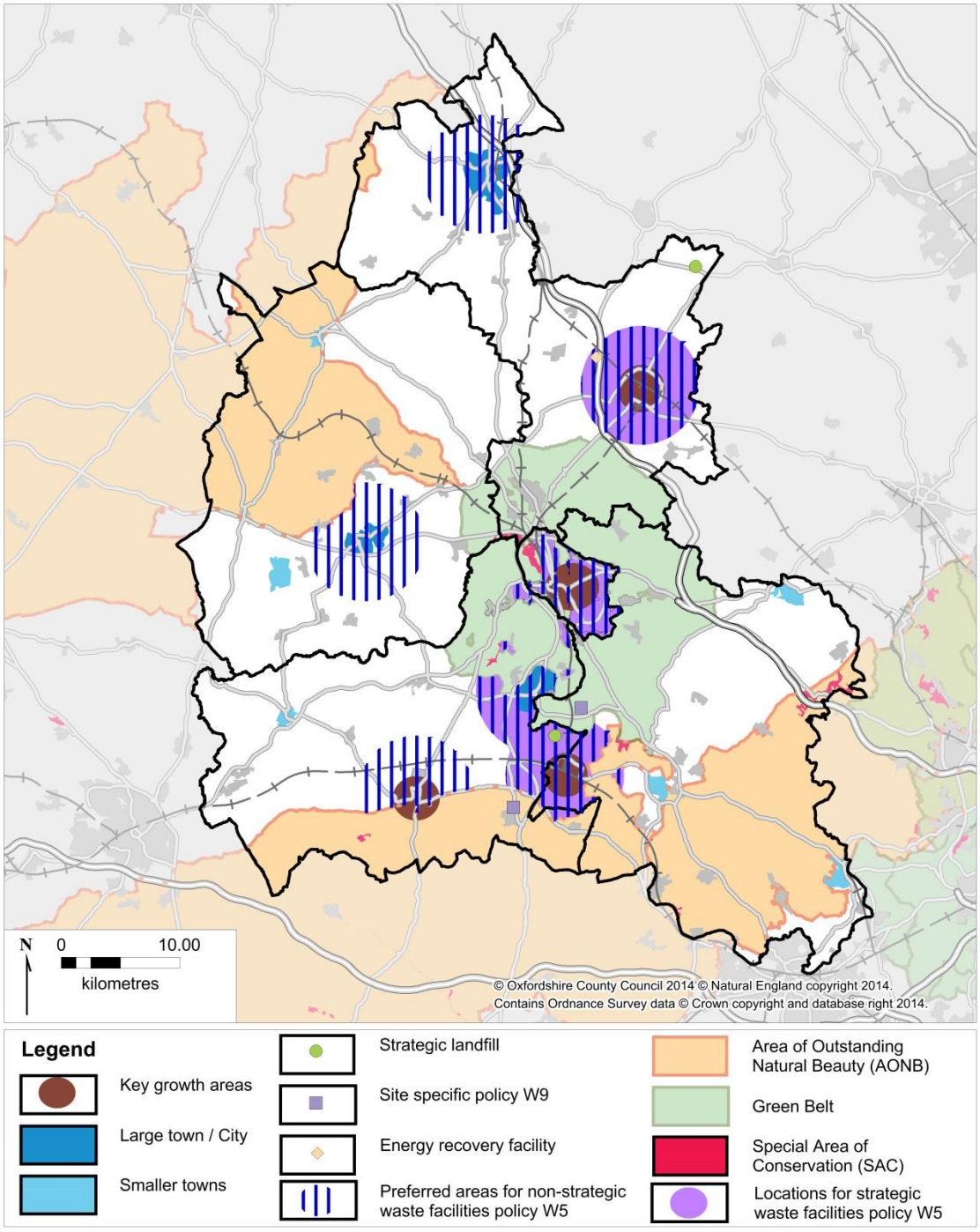
Proposals for development that would prevent or prejudice the use of a site safeguarded for waste management will not be permitted unless:

- **the development is in accordance with a site allocation for development in an adopted local plan or neighbourhood plan; or**
- **equivalent waste management capacity can be appropriately and sustainably provided elsewhere; or**
- **it can be demonstrated that the site is no longer required for waste management.**

Figure 10: Waste Key Diagram

Gaps in Green Belt to be confirmed

Key to be amended to read: 'Locations for non-strategic waste facilities policy W4' and 'Locations for strategic waste facilities policy W4'



6. CORE POLICIES FOR MINERALS AND WASTE

Sustainable development

6.1 The National Planning Policy Framework sets out how planning policies for England are expected to be applied. There is a strong presumption in favour of sustainable development and local plans are expected to follow this approach. The Plan's objectives are built on the principle of sustainable development. The Plan's policies seek to deliver sustainable development and decisions on planning applications should be taken in accordance with these policies unless material circumstances determine otherwise. However, for the avoidance of doubt, an over-arching policy is included in the plan to ensure that the presumption in favour of sustainable development is taken into account in all decisions on minerals and waste development.

6.2 **Policy C1: Sustainable development**

A positive approach will be taken to minerals and waste development in Oxfordshire, reflecting the presumption in favour of sustainable development contained in the National Planning Policy Framework and the aim to improve economic, social and environmental conditions of the area.

Planning applications that accord with the policies in this plan will be approved, unless material considerations indicate otherwise. Where there are no policies relevant to the application, or relevant plan policies are out of date, planning permission will be granted unless material considerations indicate otherwise, taking into account whether:

- **any adverse impacts of granting permission would significantly and demonstrably outweigh the benefits of the proposed development when assessed against the National Planning Policy Framework; or**
- **specific policies in the National Planning Policy Framework indicate that the development should be restricted.[84]**

Climate change

6.3 Average per capita carbon dioxide emissions from Oxfordshire are higher than the South East and national averages. The County Council is committed to increasing energy efficiency and reducing emissions. Waste recycling and recovery facilities contribute to reducing emissions by diverting waste from landfill: this is addressed specifically in policy W2. Minerals and waste facilities that are well located, designed and operated can minimise the

[84] For example, those policies relating to sites protected under the Birds and Habitats Directives (NPPF paragraph 119) and/or designated as Sites of Special Scientific Interest; land designated as Green Belt, Local Green Space, an Area of Outstanding Natural Beauty, Heritage Coast or within a National Park (or the Broads Authority); designated heritage assets; and locations at risk of flooding or coastal erosion.

generation of greenhouse gases and be resilient to the impacts of climate change.

6.4 Minerals and waste development proposals, including operational practices and restoration proposals, must take account of climate change for the lifetime of the proposed development. This will be through measures to minimise generation of greenhouse gas emissions and to allow flexibility for future adaptation. Applications for major developments should provide information on climate change in the accompanying Environmental Statement.

6.5 Methods of adaptation to climate change include the use of sustainable drainage systems designed to improve the rate and manner of absorption of water from hard and soft surfaces, reducing direct run-off into rivers or storm water systems; the use of sustainable construction methods; sustainable transport methods where possible; and the use of environmentally friendly fuels. The use of biomass sourced from woodland within Oxfordshire to generate energy can help to reduce greenhouse gas emissions at the same time as enhancing habitat biodiversity. The creation of priority habitat through the restoration of mineral working sites can also play a role in adaption to climate change.

6.6 **C2: Climate change**

Proposals for minerals or waste development, including restoration proposals, should take account of climate change for the lifetime of the development from construction through operation and decommissioning. Applications for development should adopt a low carbon approach and measures should be considered to minimise greenhouse gas emissions and provide flexibility for future adaptation to the impacts of climate change.

Flooding

6.7 Minerals and waste development is vulnerable to flooding, most commonly from fluvial sources; but damage or inconvenience can also arise from surface water run-off and groundwater. Development can increase flood risk to other property if not adequately mitigated, but may also have a positive benefit by adding to flood water storage capacity through well considered restoration of mineral workings (see also policy M10). Consideration of the risk caused by flooding must be taken into account at all stages of the planning process.

6.8 Government policy and guidance[85] aims to steer development to areas of lowest flood risk. As this is not always possible, development is categorised according to its flood risk. The level of flood risk associated with minerals and waste development is set out in Appendix 3 (table A.1).

[85] National Planning Policy Framework and National Planning Practice Guidance on Flooding.

6.9 Development in areas other than Flood Zone 1 (the lowest flood risk zone) must be sequentially tested to establish whether it could take place in an area of lower flood risk. In some cases a further test (the exceptions test) must be undertaken to establish whether development may take place in areas vulnerable to flooding. Appendix 3 (table A.2) sets out the circumstances in which minerals and waste development may take place in areas that are vulnerable to river flooding.

6.10 Sand and gravel working is 'water compatible development' – a category of development that is at the lowest vulnerability to flooding. Sand and gravel working is the only form of mineral extraction that can take place in the functional flood plain (Flood Zone 3b), provided a sequential test is undertaken. Other mineral working and all processing activities have a higher flood risk vulnerability classification.

6.11 Processing activity associated with sand and gravel working may involve plant and machinery or the formation of stockpiles, all of which can displace flood water, reduce flood water storage and interfere with water flows at times of flood. Such development can take place in areas that are at some risk of flooding (see Appendix 3) but not in the functional flood plain. As mineral working may span more than one flood zone a sequential approach to layout is needed. For sand and gravel working and processing this means that any development likely to displace flood water (including stockpiles) should be located on land that is outside the functional floodplain.

6.12 Waste development, depending on the nature of the operation, is not appropriate in the functional flood plain. This includes landfill operations - which may raise ground levels and pollute or disrupt groundwater flows. Where waste development is allowed in areas at lower risk of flooding (see Appendix 3) the sequential test and, for landfill sites, the exceptions test must first be satisfied. The potential for pollution to groundwater should also be taken into account (see paragraph 6.16). Inert waste may need to be imported to a site to achieve the satisfactory restoration of a sand and gravel working situated in the flood plain and this can take place in certain circumstances and where there is overall improvement to flood storage capacity[86].

6.13 The Strategic Flood Risk Assessment (SFRA)[87] assesses the extent to which future minerals and waste development in Oxfordshire may be at risk of flooding or increase flood risk to other property. This also takes into account the future impact of climate change. The SFRA did not identify a flood risk from potential waste development, but identified that many of the possible locations for sand and gravel working are in areas that are vulnerable to flooding. A sequential test of potential areas has been undertaken[88] and established that land to meet Oxfordshire's aggregate requirement cannot

[86] The disposal of waste in landfill in Flood Zone 3b (the functional flood plain) is contrary to the National Planning Practice Guidance on Flooding. The issue of the use of waste in the restoration of quarries in the flood plain is addressed in the Topic Paper on Restoration.
[87] Oxfordshire Minerals and Waste (Level 1) Strategic Flood Risk Assessment, Scott Wilson, October 2010.
[88] Topic Paper on Flooding and Water Environment.

reasonably be met without extracting sand and gravel from sites that lie in the functional floodplain.

6.14 Planning applications for minerals and waste development of more than a hectare in size or where situated in an area at risk of flooding must be accompanied by a site specific Flood Risk Assessment. Further guidance is given in the SFRA[89].

6.15 **Policy C3: Flooding**

Minerals and waste development will, wherever possible, take place in areas with the lowest probability of flooding. Where development takes place in an area of identified flood risk this should only be where alternative locations in areas of lower flood risk have been explored and discounted (using the Sequential Test and Exceptions Test as necessary) and where a flood risk assessment is able to demonstrate that the risk of flooding is not increased from any source, including:

- **an impediment to the flow of floodwater;**
- **the displacement of floodwater and increased risk of flooding elsewhere;**
- **a reduction in existing floodwater storage capacity;**
- **an adverse effect on the functioning of existing flood defence structures; and**
- **the discharge of water into a watercourse.**

The opportunity should be taken to increase flood storage capacity in the flood plain where possible, particularly through the restoration of sand and gravel workings.

Water environment

6.16 Minerals and waste development has the potential to affect water quality and pollute groundwater resources. Surface water run-off from hard standing areas, for example, can pollute groundwater resources. So too can the discharge of waste water from waste management operations such as composting or recycling plants if not properly controlled. Leachate from non-hazardous landfill needs to be particularly carefully controlled.

6.17 Careful consideration also needs to be given to the impact of sand and gravel extraction on groundwater resources. In the river valleys the water table is often higher and working normally gives rise to a need for dewatering. Mineral extraction can cause disruption to ground and surface water flows in these circumstances, as can the formation of artificial lakes or the partial filling of void using inert waste as part of restoration[90]. Dewatering may also impact on local groundwater abstractions and may have an adverse effect on vegetation

[89] See also National Planning Practice Guidance.

[90] The circumstances in which waste can be used in the restoration of sand and gravel workings in the flood plain are considered in the Topic Paper on Restoration.

and nearby watercourses by lowering the water table in the vicinity of workings.

6.18 In Oxfordshire there has already been much extraction of sand and gravel from the river valleys, in particular the Thames and Lower Windrush valleys. Further mineral working is expected to take place in the river valleys and the cumulative impact of extraction and restoration on groundwater needs careful consideration in these areas in addition to the specific impact of an individual working. Proposals close to an area of existing working[91] will need to take account of cumulative impact by considering:

- the nature of the geological deposits in the area;
- the characteristics of the aquifer;
- water balance calculations for operational and restoration phases of working; and
- volumetric flows or levels of local watercourses or other groundwater dependent receptors for operational and restoration phases of working.

6.19 The Environment Agency can offer appropriate advice on groundwater impact[92]. Where significant cumulative impact is envisaged groundwater modelling may need to be undertaken. The Environment Agency also has a regulatory function in relation to licensing discharges to the water environment and the abstraction of water. Abstractions that are used for drinking water (including private and unlicensed abstractions) lie in Source Protection Zones 1 and 2 and are subject to a minimum 50 metre and 250-500 metre radius protection respectively. When granting planning permission, the County Council will consider whether it is necessary to attach appropriate conditions to mitigate any potential harm to groundwater and will liaise with the Environment Agency to ensure these do not conflict with or unnecessarily duplicate other controls.

6.20 Restoration of mineral workings can provide opportunities to enhance the water environment, including through the creation of priority wetland habitat, re-naturalisation of river channels, re-connecting rivers with their floodplains, providing flood storage, retaining sediment and regulating water quality. All proposals for mineral development should demonstrate how the operation and restoration of a site will, where appropriate, protect water resources from pollution and contribute towards the aim of the River Thames River Basin Management Plan to achieve good ecological status in all waters by 2015.

6.21 **Policy C4: Water environment**

Proposals for minerals and waste development will need to demonstrate that there would be no unacceptable adverse impact on or risk to:

- **The quantity or quality of surface or groundwater resources required for habitats, wildlife and human activities;**
- **The quantity or quality of water obtained through abstraction unless acceptable alternative provision can be made; and**

[91] Within 1 kilometre of an area of existing or historic working, as recommended by the Environment Agency.
[92] See also Environment Agency Groundwater Protection: Principles and Practice (November 2012)

- **The flow of groundwater at or in the vicinity of the site.**

Proposals for minerals and waste development should ensure that the River Thames and other watercourses and canals of significant landscape, nature conservation or amenity value are adequately protected.

Local environment, amenity and economy

6.22 Provision for minerals and the effective management and disposal of waste must be balanced with the need to protect people and the environment from potential harm[93]. If alternative locations are available, needs should normally be met on land that causes least overall harm to amenity, particularly bearing in mind the need to protect human health[94]. Minerals and waste development often gives rise to concerns about pollution and harm to people and the environment. Planning decisions should ensure that no unacceptable harmful impact[95] results from development and measures can normally be put in place to ensure that development meets appropriate standards.

6.23 Issues of noise, dust, air quality and vibration should be taken into account when considering proposals for mineral development. Pollution from associated traffic and visual impact are also relevant and in some cases issues associated with tip and quarry-slope stability, differential settlement of quarry backfill and subsidence may also arise[96]. A buffer zone can help to mitigate potential harm from workings. Standard distances for buffer zones between workings and sensitive receptors[97] are not specified as they can lead to unnecessary restriction and sterilisation of mineral resources: they may also result in inadequate protection measures for affected property. The extent of any buffer zone should be decided on a case by case basis at the planning application stage.

6.24 Many of the issues raised by mineral development are also relevant to proposals for waste management. Concerns about odour, vermin, birds, litter and light pollution may also arise[98]. In many cases there are national standards to help assess whether any harm may be unacceptable and the County Council will seek advice from the relevant District Council on certain issues, particularly noise. The extraction of minerals can be concentrated in particular areas, for example where there are commercially workable mineral resources and there has been investment in infrastructure. Proposals for further development should consider the cumulative impact of working on

[93] A key objective of the NPPF is that "planning should contribute to conserving and enhancing the natural environment and reducing pollution".
[94] Paragraph 120 of the National Planning Policy Framework and paragraph 1, Planning Policy Statement 10 – Planning for Sustainable Waste Management.
[95] Paragraph 144 of the National Planning Policy Framework. Paragraph 123 also draws attention to the need to avoid "significant adverse impact" from noise.
[96] Impacts arising from site restoration, including bird strike, are addressed in policy M8.
[97] Including housing, schools, hospitals and offices. This also applies to waste developments.
[98] A full list of considerations is set out in Appendix E of PPS 10 – Planning for Sustainable Waste Management

local amenity. Cumulative impact should also be taken into account in proposals for the expansion of existing waste facilities.

6.25 The Environment Agency operates controls that overlap with the planning process. Planning focuses on the acceptable use of land and the impact of that use[99] and when decisions are made it can be assumed that pollution control regimes will operate effectively to control emissions to air and discharges to water, etc. An application for an environmental permit can be sought prior to or concurrently with a planning application. This allows for all relevant information to be available at the planning stage and can help avoid unnecessary duplication of controls. Planning conditions should not normally be used to control matters that are the subject of an environmental permit.

6.26 Policy C5 addresses general environmental and amenity considerations only. Other core policies address areas associated with environmental protection, including water quality, the natural environment, the historic environment and landscape.

6.27 **Policy C5: Local environment, amenity and economy**

Proposals for minerals and waste development shall demonstrate that they will not have an unacceptable adverse impact on:

- **the local environment;**
- **human health and safety;**
- **residential amenity and other sensitive receptors; and**
- **the local economy;**

including from:

- **noise;**
- **dust;**
- **visual intrusion;**
- **light pollution;**
- **traffic;**
- **air quality;**
- **odour;**
- **vermin;**
- **birds;**
- **litter;**
- **mud on the road;**
- **vibration;**
- **surface or ground contamination;**
- **tip and quarry-slope stability;**
- **differential settlement of quarry backfill;**
- **subsidence; and**
- **the cumulative impact of development.**

Where necessary, appropriate separation distances or buffer zones between minerals and waste developments and occupied residential

[99] Paragraph 122 of the National Planning Policy Framework.

property or other sensitive receptors and/or other mitigation measures will be required, as determined on a site-specific, case-by-case basis.

Agricultural land and soils

6.28 Where significant development on agricultural land is necessary, national policy[100] is that local planning authorities should seek to use areas of poorer quality land in preference to that of a higher quality. There are extensive areas of high quality agricultural land in Oxfordshire, much of which is underlain by minerals, particularly sand and gravel. Proposals for minerals development will be expected to address the impact of the development on the extent and quality of any best and most versatile (BMV) agricultural land (grades 1, 2 and 3a)[101]. Where appropriate, agricultural land classification survey information should be provided. Proposals for waste development should be capable of avoiding best and most versatile agricultural land and permanent development involving the loss of such land will not normally be permitted.

6.29 The quality of the existing land will be an important factor when selecting the form of restoration and after-use of mineral workings. Where mineral extraction affects BMV agricultural land, proposals for restoration and aftercare should look to preserve the long-term potential for the land and its soils as a high quality agricultural resource wherever possible. Proposals for restoration need to be realistic, however, and in some cases a return to agriculture may need to be at lower level due to a lack of availability of suitable inert infill material. In the floodplain the use of fill to restore mineral working must take account of national policy on flood risk (see also policies C3 and M10) and a return to agriculture may not always be possible; it may not be possible to return land to pre-existing levels and a return to agricultural land at lower level may not be practicable due to a high water table.

6.30 Where BMV agricultural land would not be restored after mineral extraction, proposals will need to demonstrate that the need for the mineral cannot reasonably be met on lower grade land and that there is good planning reason to justify the development in that location. Any benefit, such as a net gain in biodiversity, that may result from a different form of restoration will also be a relevant consideration. Where restoration would not be to agriculture, provision for the sustainable management and use of soils disturbed during extraction should be demonstrated, such that if required the soils would be in a state capable of supporting agriculture. This should include stripping and storage of soils in ways that maintain soil quality. Where BMV agricultural land is not restored, proposals must show how alternative and beneficial use is to be made of high quality soils that are not being replaced.

[100] National Planning Policy Framework (2012), paragraph 112.
[101] Agricultural Land Classification: Natural England Technical Information Note TIN049 (2012).

6.31 **Policy C6: Agricultural land and soils**

Proposals for minerals and waste development shall demonstrate that they take into account the presence of any best and most versatile agricultural land.

The permanent loss of best and most versatile agricultural land will only be permitted where it can be shown that there is a need for the development which cannot reasonably be met using lower grade land, taking into account other relevant considerations.

Development proposals should make provision for the management and use of soils in order to maintain soil quality, including making a positive contribution to the long-term conservation of soils in any restoration.

Biodiversity and geodiversity

6.32 Oxfordshire has a significant number of statutorily designated sites of international, national and local nature conservation importance, intended to protect important species, habitats and geological features[102]. These include seven Special Areas of Conservation designated under European legislation. At the national level, there are 102 Sites of Special Scientific Interest in Oxfordshire, four of which are also designated as National Nature Reserves. In addition, there are 362 locally designated Local Wildlife Sites, some of which are also designated as Local Nature Reserves. National policy provides that the level of protection given to designated sites depends on their status. The overall intention is to ensure that a net gain in biodiversity is achieved, including by maintaining, establishing and where practicable enhancing ecological networks to reduce habitat fragmentation.

6.33 Mineral and waste development, particularly mineral working, can often impact on biodiversity, but restoration of sites normally offers opportunity for net gains in biodiversity. Other forms of mineral development, and waste development, can also provide opportunity for net gains. In looking at opportunities for net gains, factors such as time delay in delivering the requisite ecosystem functions and risk that expected outcomes would not be delivered should be considered. Policy C7 provides the basis for considering whether the impact of minerals or waste development in terms of biodiversity is acceptable or capable of satisfactory mitigation. It also addresses the restoration of sites where the after-use is related to biodiversity (see also policy M10). Arrangements for the long term management of restored sites need to be agreed, including arrangements for monitoring and remediation (should establishment of habitats or mitigation for species prove unsuccessful).

6.34 Special Areas of Conservation (SACs) are protected by particular legislation and are given the highest level of protection. Possible SACs are given the

[102] Further details are contained in the Topic Paper on Biodiversity and Geodiversity.

same level of protection. Sites of Special Scientific Interest (SSSIs) are designated nationally and, in line with national policy, these are afforded a high level of protection. Development likely to have an adverse effect on a SSSI should not normally be permitted. An exception should only be made where the benefits of developing the site clearly outweigh the harm likely to be caused to the SSSI and any broader impact on the national network.

6.35 Oxfordshire also has a large number of sites designated locally for their importance to wildlife or habitat including Local Wildlife Sites, Local Nature Reserves and Sites of Local Importance for Nature Conservation. Development should avoid any adverse effects on these areas. If avoidance of adverse effects is not feasible, adequate mitigation or as a last resort compensatory measures that will result in the maintenance or enhancement of biodiversity (or geodiversity) should be provided. If the effects cannot be avoided or mitigated or, as a last resort, compensated for, then the development should not be allowed to proceed.

6.36 A variety of legally protected species, notable species and UK priority habitats and species are found in Oxfordshire. The highest level of protection is given to European Protected Species. However, harm to all priority habitats and to all protected, notable and priority species should be avoided.

6.37 36 Conservation Target Areas (CTAs) have been identified in Oxfordshire to help deliver the objectives of National and Local Biodiversity Action Plans[103]. The CTAs include concentrations of existing high value nature conservation sites, including designated sites, as well as land that can provide important ecological linkages between these sites. They provide a network of green infrastructure where targeting improvement can achieve maximum benefit for biodiversity. Minerals and waste development close to or within a CTA should ensure that opportunity is taken to conserve and enhance the nature conservation interest of the CTA, including improving habitat connectivity.

6.38 Irreplaceable habitat, including ancient woodland, aged or veteran trees, ancient hedgerows, species rich grassland and fens[104], should be protected from development that would cause loss, deterioration or other adverse impact. Only about 9% of the county is covered by woodland. Ancient woodland accounts for 38% of the woodland cover and is particularly valued because it is irreplaceable. Elsewhere, development should seek to preserve existing trees wherever possible and provide for additional tree planting with native species for screening and landscaping as appropriate. Tree planting may provide a productive land use on restored mineral workings that can contribute to climate change mitigation and adaption where landscape and biodiversity objectives are met.

6.39 Oxfordshire has a rich geological resource. Some nationally important geological sites are designated as Sites of Special Scientific Interest. Local

[103] The objectives of the UK Biodiversity Action Plan are now incorporated within the UK Post 2010 Biodiversity Framework, 2012; and Biodiversity 2020: A Strategy for England's Wildlife & Ecosystems incorporates the objectives of the previous Biodiversity Strategy for England.
[104] Biodiversity and Planning in Oxfordshire, OCC and others March 2014

Geology Sites (formerly known as Regionally Important Geological and Geomorphological Sites – RIGS) are designated by the Oxfordshire Geology Trust and are also of importance and should also be protected.However, previously unknown geological features and remains of importance (including fossils and trace fossils) may also be discovered. Where such finds are made, every effort should be made to protect those of potential international or national importance. Where it is not possible to afford the same protection to finds of more local importance, they should be appropriately recorded. Where possible, access to all geological finds should be provided for educational purposes.

6.40 **Policy C7: Biodiversity and geodiversity**

Minerals and waste development should conserve and, where possible, deliver a net gain in biodiversity.

The highest level of protection will be given to sites and species of international nature conservation importance (e.g. Special Areas of Conservation and European Protected Species) and development that would be likely to adversely affect them will not be permitted.

Development that would be likely to have an adverse effect on a Site of Special Scientific Interest (either individually or in combination with other development) will not be permitted except where the benefits of the development at this site clearly outweigh both the impacts that it is likely to have on the Site of Special Scientific Interest and any broader impacts on the national network of Sites of Special Scientific Interest.

Development that would result in the loss or deterioration of irreplaceable habitats, including ancient woodland and aged or veteran trees, will not be permitted except where the need for and benefits of the development in that location clearly outweigh the loss.

Development shall ensure that no significant harm would be caused to:

- **Local Nature Reserves;**
- **Local Wildlife Sites;**
- **Local Geology Sites;**
- **Sites of Local Importance for Nature Conservation;**
- **Protected, priority or notable species and habitats.**

Development that would result in significant harm will not be permitted, unless the harm can be adequately mitigated or, as a last resort, compensated for to result in a net gain in biodiversity (or geodiversity) or, if the impact cannot be fully mitigated or compensated for, the benefits of the development on that site clearly outweigh the harm.

All proposals for mineral working and landfill shall demonstrate how the development will make an appropriate contribution to the maintenance and enhancement of local habitats, biodiversity or geodiversity (including fossil remains and trace fossils), including contributing to the

objectives of the Conservation Target Areas wherever possible. Satisfactory long-term management arrangements for restored sites shall be clearly set out and included in proposals. These should include a commitment to ecological monitoring and remediation (should habitat creation and/or mitigation prove unsuccessful).

Landscape

6.41 When considering proposals for minerals and waste development in Areas of Outstanding Natural Beauty (AONB) the County Council has a statutory duty to have regard to the purpose of conserving and enhancing the natural beauty of those areas. The setting of and views associated with the Chilterns, Cotswolds and North Wessex Downs AONBs should also be taken into account in considering development proposals[105]. National policy requires great weight to be given to conserving landscape and scenic beauty in AONBs, which have the highest status of protection[106]. Major development should not take place in AONBs unless there are exceptional circumstances and such development is 'in the public interest'[107].

6.42 A key aim of planning in AONBs is to take account of the need to safeguard agriculture, forestry, other rural industries and the economic and social needs of local communities[108]. This points to development being small scale to serve local needs. In Oxfordshire this is likely to rule out most mineral development with the possible exception of small quarries supplying local building stone, for example, a quarry in the Cotswolds AONB supplying building or walling stone to meet needs within the AONB and surrounding areas where this is the local traditional building material.

6.43 Parts of the Cotswolds, North Wessex Downs and Chilterns AONBs are situated close to towns where growth is expected and additional waste will be produced. Any new waste facilities that are required should be located in or close to these towns and located in a way that does not adversely affect the character or setting of the AONB. Small scale waste management facilities for local needs could be acceptable where the development would not compromise the objectives of their designation[109]. Proposals for development (both minerals and waste) within AONBs should have regard to the relevant AONB Management Plan.

6.44 National planning policy recognises the importance of the countryside[110]. Across the county proposals for minerals and waste development should be designed to minimise visual impact and where possible enhance the quality and character of the countryside and landscape. Restoration and after use of

[105] The relevant AONB Management Plan should inform the consideration of proposals for development within or in proximity to an AONB.
[106] National Planning Policy Framework (2012) paragraph 115.
[107] National Planning Policy Framework (2012) paragraph 116.
[108] Natural England website guidance.
[109] In May 2013 an appeal decision in West Berkshire (APP/W0340/A/12/2188549) found that a proposal for a MRF of 25-30,000 tpa capacity would be "out of character with the beauty and tranquillity of the AONB".
[110] National Planning Policy Framework – Core Planning Principles (paragraph 17).

mineral working should take account of the landscape character areas set out in the Oxfordshire Wildlife and Landscape study and other relevant landscape character assessments. Any local landscape designations in district local plans should also be taken into account.

6.45 Minerals and waste development close to a settlement should take account of the character and setting of the settlement. Proposals should set out measures for an acceptable separation distance with landscaping and planting that is appropriate to the character of the area and that would be consistent with the proposed after-use of the site. Where development is considered acceptable, consideration should be given to after-uses that help develop a network of green infrastructure for the benefit of the local community, wildlife and habitat.

6.46 **Policy C8: Landscape**

Proposals for minerals and waste development shall demonstrate that they respect and where possible enhance local landscape character, and are informed by landscape character assessment. Proposals shall include adequate and appropriate measures to mitigate adverse impacts on landscape, including careful siting, design and landscaping.

Great weight will be given to conserving the landscape and scenic beauty of Areas of Outstanding Natural Beauty (AONB) and high priority will be given to the enhancement of their natural beauty. Proposals for minerals and waste development within an AONB or that would significantly affect an AONB shall demonstrate that they take this into account and that they have regard to the relevant AONB Management Plan. Major developments within AONBs will not be permitted except where it can be demonstrated they are in the public interest. Development within AONBs shall normally only be small-scale, to meet local needs and should be sensitively located and designed.

Where adverse impacts cannot be avoided or adequately mitigated, compensatory environmental enhancements shall be made to offset the residual landscape and visual impacts.

Historic environment and archaeology

6.47 Oxfordshire has a wide range of heritage assets including the Blenheim Palace World Heritage Site, listed buildings, historic parks and gardens and scheduled monuments, which influence the character of the environment and sense of place. There are extensive archaeological assets located in the river valleys where mineral resources are also present. There are also many conservation areas across the county. National policy[111] requires that great weight be given to the conservation of heritage assets; and the more important the asset, the greater the weight that should be given. Heritage

[111] National Planning Policy Framework (2012), paragraph 132.

assets are irreplaceable and therefore any harm or loss should require clear and convincing justification. National policy is that harm to or loss of a grade II listed building, park or garden should be exceptional; and that harm to or loss of designated heritage assets of the highest significance (including scheduled monuments, battlefields, grade I and II* listed buildings and registered parks and gardens, and World Heritage Sites) should be wholly exceptional.

6.48 The non-designated heritage assets within Oxfordshire are also of importance. National policy[112] requires that the effect of development proposals on the significance of non-designated heritage assets be taken into account; and that non-designated heritage assets of archaeological interest that are demonstrably of equivalent significance to scheduled monuments should be considered subject to the policies for designated assets. Proposals for minerals and waste development should as appropriate include measures to conserve both designated and non-designated heritage assets and to protect them from loss or harm.

6.49 Before determining an application for mineral extraction or waste development the County Council will normally require the applicant to describe the significance of any heritage assets affected, and any contribution made by their setting. The level of detail should be proportionate to the asset's importance but sufficient to understand the potential impact of the proposal on their significance.

6.50 Where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest, the applicant should carry out a preliminary desk-based archaeological assessment to determine the nature and significance of any archaeological assets, and the contribution of the setting to that significance, as well as any potential impacts on the assets or their setting. This preliminary assessment should also identify any previously unrecorded heritage assets on which information is available. The County Council may, subject to the results of this initial assessment, require an archaeological field evaluation of the site to inform the determination of the application. This information should identify any means for mitigating the impact of extraction on the heritage assets.

6.51 **Policy C9: Historic environment and archaeology**

Proposals for minerals and waste development will not be permitted unless it is demonstrated, including where necessary through prior investigation, that they or associated activities will not have an unacceptable adverse impact on the historic environment.

Great weight will be given to the conservation of designated heritage assets: Blenheim Palace World Heritage Site; scheduled monuments; listed buildings; conservation areas; historic battlefields; registered parks and gardens; and non-designated archaeological assets which are

[112] National Planning Policy Framework (2012), paragraphs 135 & 139.

demonstrably of equivalent significance to a scheduled monument; and the setting of those assets.

Where an application would affect a non-designated heritage asset, the benefits of the proposal will be balanced against the scale of harm to or loss of the heritage asset and its significance.

Where, following assessment of an application, the loss (wholly or in part) of a heritage asset is considered acceptable in principle, the applicant will be required to record and advance understanding of that asset, proportionate to the nature and level of the asset's significance, and to publish their findings.

Proposals for mineral working and landfill shall wherever possible demonstrate how the development will make an appropriate contribution to the conservation and enhancement of the historic environment.

Transport

6.52 The Oxfordshire Local Transport Plan 2011 – 2030 (LTP3) aims to reduce carbon emissions from transport, improve air quality and reduce other environmental impacts. The County Council recognises that the transport network should be operated in a way that balances the protection of the local environment with efficient and effective access for freight and distribution. To ensure that traffic from new development can be accommodated safely and efficiently on the transport network, contributions are often sought to mitigate adverse impacts: commuted sums can also be sought toward the operation and maintenance of facilities, services and infrastructure[113].

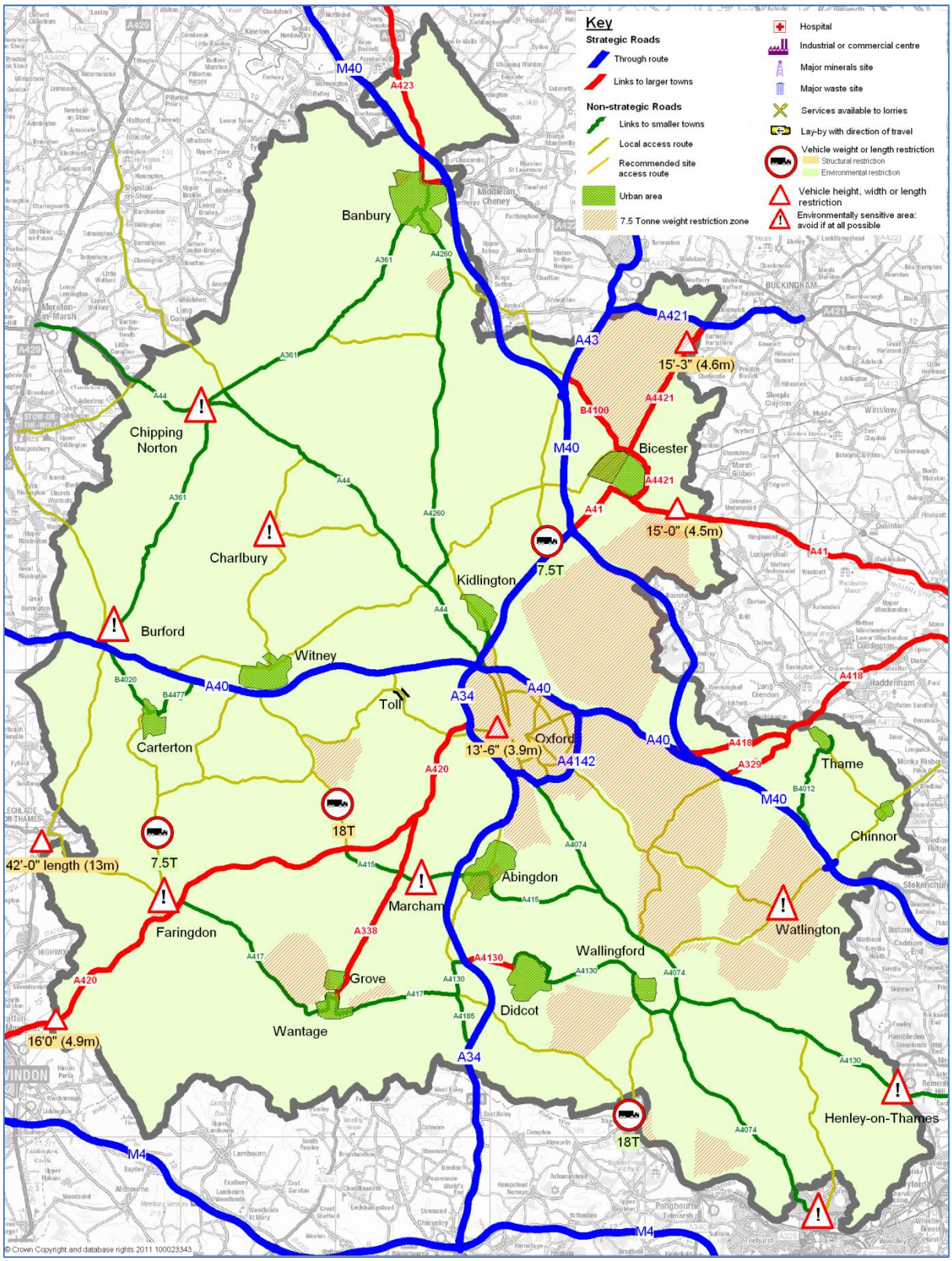
6.53 The impact of traffic associated with minerals and waste development must always be taken into account when considering the suitability of a site in relation to local communities and the environment generally. Account should also be taken of the need to minimise the distances materials need to be transported, to achieve a commensurate reduction in air pollution, greenhouse gas emissions and overall impact on the environment.

6.54 The harm caused by the movement of minerals and waste by road can be reduced by encouraging the uptake of alternative transport methods such as rail, conveyor, pipeline and water. These alternatives can be practicable where movement of large quantities over long distances is involved or in particular local circumstances[114]. However, it may not be economically viable or practicable for quarries and waste facilities to use such alternatives where minerals are distributed mostly to local markets or where waste is produced and handled locally. For these reasons aggregates and waste in Oxfordshire are likely to continue to be transported mainly by road.

[113] Policy SD2 of the Oxfordshire Local Transport Plan 2011-2030 (revised April 2012).

[114] Oxfordshire's need for hard crushed rock is largely met by material being transported by rail to depots at Banbury, Kidlington and Sutton Courtenay.

Figure 11: Oxfordshire Lorry Route Map



Source: Oxfordshire Lorry Routes (Feb 2012) Oxfordshire County Council

6.55 Most of the traffic associated with minerals and waste development involves heavy goods vehicles, and it is important that sites secure safe and suitable access[115] to roads that are suitable for such traffic. Figure 13 shows the network of roads that make up the County Council's preferred routes for use by heavy goods vehicles to get to the major destinations across Oxfordshire (the Oxfordshire Lorry Route Map). The County Council has also published detailed lorry route maps for the main urban areas. Direct access to these advisory lorry routes will not always be possible, particularly in the case of motorways and trunk roads. Where direct access is not possible, sites should generally be in locations that have access to a road which provides convenient access to this network and avoids the use of roads not suited to heavy goods vehicles or which pass through rural settlements.

6.56 The provision of safe and suitable access to the Oxfordshire lorry route network from minerals and waste developments may require alteration of road junctions or improvements to roads. Where this is the case, the developer will be expected to provide the required alteration or improvement, or the Council will seek and the developer will be expected to make an appropriate contribution to enable the required alteration or improvement to be carried out, before the development starts. Where traffic impacts cross the county boundary, the County Council will liaise with the relevant adjoining local authority over any alterations or improvements that may be required and the mechanism for their provision. Lorries can damage highways and lead to a need for more frequent maintenance and commuted sums towards on-going maintenance of part of a route to access the lorry route network may also be sought, in line with the Local Transport Plan.

6.57 The harmful impact of lorry traffic in environmentally sensitive locations and settlements can be reduced by routeing agreements to control traffic movements. Such agreements will direct lorry traffic to and along the lorry route network (figure 13) taking into account road standard, settlements, road safety issues and other factors. This also needs to be balanced against the likelihood of vehicles driving further, increasing carbon emissions and pollution. If appropriate mitigation of unacceptable traffic impacts cannot be secured, the site is unlikely to be suitable for the type of development proposed. Where appropriate, agreements may also be used to control lorry movements at particular times, for example to reduce trips during peak traffic periods or in relation to school arrival and leaving times.

6.58 Preparation of the Site Allocations Document will be supported by a transport assessment or transport statement, as that document will allocate sites for specific development proposals that would generate traffic. A transport assessment or transport statement, as appropriate, will also be required to support planning applications for development proposals that would generate significant traffic movements. The need for such an assessment or statement, its scope and the information that should be included will be considered on a case by case basis having regard to National Planning Practice Guidance.

[115] Paragraph 32 of the National Planning Policy Framework.

6.59 **Policy C10: Transport**

Minerals and waste development will be expected to make provision for safe and suitable access to the advisory lorry routes shown on the Oxfordshire Lorry Route Maps in ways that maintain and, if possible, lead to improvements in:

- **the safety of all road users including pedestrians;**
- **the efficiency and quality of the road network; and**
- **residential and environmental amenity, including air quality.**

Where development leads to a need for improvement to the transport network to achieve this, developers will be expected to provide such improvement or make an appropriate financial contribution.

Where practicable minerals and waste developments should be located, designed and operated to enable the transport of minerals and/or waste by rail, water, pipeline or conveyor.

Where minerals and/or waste will be transported by road:

a) mineral workings should as far as practicable be in locations that minimise the road distance to locations of demand for the mineral, using roads suitable for lorries, taking into account the distribution of potentially workable mineral resources; and

b) waste management and recycled aggregate facilities should as far as practicable be in locations that minimise the road distance from the main source(s) of waste, using roads suitable for lorries, taking into account that some facilities are not economic or practical below a certain size and may need to serve a wider than local area.

Proposals for minerals and waste development that would generate significant amounts of traffic will be expected to be supported by a transport assessment or transport statement, as appropriate, including mitigation measures where applicable.

Rights of way

6.60 The Oxfordshire Rights of Way Improvement Plan and the Oxfordshire Local Transport Plan 2011 – 2030 set out the County Council's intention to protect and maintain public rights of way and natural areas so that all users are able to understand and enjoy their rights in a responsible way. These plans also note that the County Council will seek opportunities for network improvements and initiatives to better meet the needs of walkers, cyclists, and horse riders, including people with disabilities, for local journeys, recreation, and health.

6.61 Proposals to enhance, promote and improve the rights of way network and to increase permissive access to the countryside should be brought forward as

part of restoration plans for mineral workings and landfill sites[116]. Operators and landowners can usefully discuss plans with the local community before finalising such proposals. Proposals should consider arrangements for future management of access routes in the longer term.

6.62 Where a proposal for mineral extraction or other form of minerals or waste development would affect a right of way, the impact on its amenity value should be considered in addition to the impact on it as a route. If a proposal for development would necessitate the temporary diversion or closure of a right of way, the planning application should provide all details, including the proposed route, the width of the proposed diversion, the materials to be used and the access implications for users, which demonstrate that a safe, attractive and convenient right of way will be maintained. Where temporary diversions are required applications should also provide details of how the right of way will be restored when the mineral workings are completed. The process for diverting a public right of way whether on a temporary or permanent basis follows a separate application process and advice from Oxfordshire County Council should be sought beforehand.

6.63 Public access to restored mineral workings should be carefully managed so as not to impact adversely on any sensitive habitats and species in the restored area.

6.64 **Policy C11: Rights of way**

The integrity and amenity value of the rights of way network shall be maintained and if possible it shall be retained in situ in safe and useable condition. Diversions should be safe, attractive and convenient and, if temporary, shall be reinstated as soon as possible. If permanent diversions are required, these should seek to enhance and improve the public rights of way network.

Improvements and enhancements to the rights of way network will generally be encouraged and public access sought to restored mineral workings, especially if this can be linked to wider provision of green infrastructure. Where appropriate, operators and landowners will be expected to make provision for this as part of the restoration and aftercare scheme.

[116] Paragraph 75 of the National Planning Policy Framework.

7. IMPLEMENTATION AND MONITORING

This section requires some further editing and factual updating

Implementation of the minerals planning strategy

7.1 Implementation of the minerals planning strategy will be achieved through preparation of part 2 of the Minerals and Waste Local Plan – the Site Allocations Document; and also through the determination of planning applications for mineral working and other minerals developments. In carrying out its responsibility as mineral planning authority for dealing with applications for minerals development, the County Council will cooperate with the District Councils (the local planning authorities). The County Council will seek to work closely with local stakeholders, other statutory bodies and the minerals industry, to provide appropriate advice prior to the submission of applications and to engage with local residents.

7.2 The aim will be to ensure that development delivers the objectives of the minerals planning strategy. This will be done by taking due account of the policies and proposals in the strategy in the assessment of site options for allocation in the Site Allocations Document; and also in pre-application discussions and when determining planning applications and by imposing appropriate planning conditions and, where necessary, negotiating legal agreements when permissions are granted.

7.3 The minerals planning strategy aims to enable sufficient supply of aggregate minerals to meet the development needs of Oxfordshire and to make an appropriate contribution to wider needs. The quarries and other minerals supply facilities and infrastructure that will be needed will be delivered through investment and development by the private sector, in particular landowners and the minerals industry. Implementation of the strategy will depend on proposals for sufficient sites (for recycling plants, quarry extensions and/or new quarries) in appropriate locations coming forward as site nominations for possible allocation in the Site Allocations Document; and as planning applications in time to be available to enable supply needs to be met. The Council will cooperate with other mineral planning authorities to ensure an adequate & steady supply of minerals is maintained.

7.4 The Local Aggregate Assessment identifies the provision for minerals supply that needs to be made over the plan period, and that the minerals planning strategy needs to provide for. The strategy makes separate provision for secondary and recycled aggregates and for locally extracted aggregates: sharp sand and gravel; soft sand; and crushed rock; and includes a policy on importation of aggregates by rail.

7.5 The strategy indicates that on the basis of Local Aggregate Assessment 2014, currently the additional provision required for mineral working over the plan period is: approximately 5.4 million tonnes of sharp sand and gravel; 1.238 million tonnes of soft sand; and no additional requirement for crushed rock. Locations where the required mineral working should take place are identified (policy M3).

7.6 Provision for secondary and recycled aggregates (policy M1) is to be made through a mix of permanent facilities and temporary facilities at aggregate quarries and inert waste landfill sites. Supply is expected to be primarily from recycling of construction and demolition waste. Provision for this will need to be made in conjunction with the provision for construction, demolition and excavation waste facilities as part of the Council's waste planning strategy. Many existing aggregates recycling facilities are operating on temporary permissions; these will need to be replaced or have their operational life extended in order to maintain supply capacity.

7.7 Three strategic resource areas are identified as principal locations for working of sharp sand and gravel (policy M3). Within these areas, specific sites for mineral working will be allocated in the Site Allocations Document. It is anticipated that current permitted reserves will on average last until around 2022. Priority is to be given to further working through extensions to existing quarries, but the strategy also provides for new quarries as these are expected to be needed to replace exhausted quarries. The strategy includes achieving a change in the balance of production capacity between the strategic resource areas in western and southern Oxfordshire to more closely reflect the distribution of demand for sharp sand and gravel in the county. This is to be achieved through the allocation of sites for working in the Site Allocation Document. It is expected that there will be a need for a new working area within southern Oxfordshire during the plan period, particularly since the existing Sutton Courtenay Quarry has only a few years' worth of permitted reserves remaining and limited possibilities for further extension. Implementation of the strategy will depend on sufficient site nominations and planning applications coming forward in acceptable locations to enable all areas to make an appropriate contribution to the overall level of supply, including a phased transition of working from existing quarries that become exhausted to new working areas.

7.8 Two strategic resource areas, within which there are existing workings, are identified as principal locations for further provision of soft sand (policy M3). Within these areas, specific sites for mineral working will be allocated in the Site Allocations Document. It is anticipated that current permitted reserves will on average last until around 2024. Continuation of supply is preferentially to be through extensions to existing quarries, to make the most efficient use of existing plant and infrastructure. However, new quarries will be permitted if sufficient supply cannot be made through extensions. Implementation of the strategy will depend on sufficient site nominations and planning applications coming forward in acceptable locations to enable each area to make an appropriate contribution to the overall level of supply.

7.9 Three strategic resource areas, within which there are existing workings, are identified as principal locations for further provision of crushed rock (policy M3). Within these areas, specific sites for mineral working will be allocated in the Site Allocations Document if required. It is anticipated that current permitted reserves will on average last until 2031, i.e. to the end of the plan period. However, additional provision may be needed towards the end of the

plan period if demand increases. If so, this is preferentially to be through extensions to existing quarries, to make the most efficient use of existing plant and infrastructure, but new quarries will be permitted if sufficient supply cannot be made through extensions.

7.10 Site options for possible allocation in the Site Allocations Document will be assessed against the criteria in policy M4 and the core policies C1 to C11. Proposals for aggregate mineral working within sites that are allocated in the Site Allocations Document, and therefore accord with the minerals planning strategy will normally be permitted under policy M5. Proposals for mineral working may come forward in other locations, but these will not normally be permitted unless the provision required to deliver the strategy cannot be met from identified areas.

7.11 Possible sites for mineral working have been put forward (nominated) to the County Council by mineral operators and landowners. A preliminary technical assessment of these site options has been undertaken, which shows that the minerals planning strategy is potentially capable of being delivered.

7.12 Provision to meet requirements for non-aggregate minerals, in particular building stone and clay, will depend on applications coming forward in acceptable locations, which will be considered against policy M7. Proposals for working other minerals, including chalk, fuller's earth and oil and gas, are not currently expected but policy M7 provides a policy basis for considering any such applications.

7.13 Improvements to infrastructure, particularly roads and junctions, may be required in order that new quarries or extensions to existing quarries can be developed in a way that is locally acceptable. Appropriate financial contributions for such improvements will be sought from mineral developers and operators through legal agreement at the planning application stage. Where appropriate, financial contributions may also be sought to ensure the successful achievement of biodiversity, landscape or other gains through mineral working and restoration. Provisions for obtaining developer contributions are changing with the introduction of the Community Infrastructure Levy, which will need to be taken into account in implementing the strategy.

7.14 The strategy depends on permitted mineral working sites, secondary and recycled aggregates production sites and aggregates rail depots being available to be worked or operate to their full extent or capacity. It also depends on potentially workable mineral resources being kept available throughout the plan period and not being sterilised by other development. This is also important for ensuring that mineral resources are potentially available for the longer term. Mineral safeguarding areas will be defined and identified in the Site Allocations Document, in accordance with policy M8); and mineral consultation areas will be drawn up to define areas wherein the District Councils must consult the County Council on applications for specified types of development. Aggregate rail depots and other important minerals infrastructure will be safeguarded under policies M6 and M9, with

safeguarded sites being identified in the Site Allocations Document. Delivery of these parts of the strategy will require liaison with the District Councils.

7.15 The core policies C1 to C11 have been developed to ensure the minerals strategy is delivered in an environmentally acceptable way, including by setting out criteria against which site options will be assessed and planning applications will be considered. These policies will be implemented by the County Council through the development management process.

Monitoring of the minerals planning strategy

7.16 The minerals planning strategy is based on current circumstances and currently available information, but it must be able to respond to changing circumstances and needs. The County Council as Mineral Planning Authority will monitor the effectiveness of the policies and proposals in delivering the vision and objectives of the strategy and the changing context within which the strategy is being used.

7.17 The Council will produce a Minerals and Waste Monitoring Report at least annually, in accordance with the Planning and Compulsory Purchase Act 2004 (as amended). These reports will include an assessment of:

- the extent to which the policies in the Minerals and Waste Local Plan are being achieved;
- any changes needed where policies are not working or objectives are not being met; and
- progress on the preparation of minerals and waste local plan documents.

Any relevant changes in government or other policy will be addressed through the monitoring reports.

7.18 The Council will continue to carry out regular monitoring of sales and reserves of aggregate minerals and of planning applications and decisions, as well as monitoring of mineral working sites. The Council will work with the minerals industry and with other mineral planning authorities, including through the South East Aggregates Working Party, in monitoring sales, distribution and reserves of aggregates and changes in patterns of supply, and in forecasting future demands.

7.19 The Council will also make use of monitoring and survey work undertaken by other agencies, such as the Environment Agency, Natural England and English Heritage, and of other work carried out within the Council such as for transport planning and biodiversity, to monitor change.

7.20 Observations recorded in the monitoring reports will feed into reviews of the minerals planning strategy. It is intended that the Core Strategy will be reviewed and rolled forward every five years. However, monitoring may indicate a need for review of part or the whole of the Core Strategy sooner. For example, if it becomes clear that the provision for minerals supply in the strategy is insufficient or excessive, or that insufficient sites can be allocated

or are coming forward as planning applications within the strategic resource areas identified, an earlier review of the Core Strategy may be required.

7.21 An implementation and monitoring framework for the Core Strategy minerals planning strategy will be included in the Minerals and Waste Monitoring Reports. Indicators and targets will be developed to provide a consistent basis for monitoring the performance of the Core Strategy's vision, objectives and policies for minerals development to 2031. The indicators will reflect the intent of the strategy objectives and the sustainability appraisal framework identified in the Sustainability Appraisal Report.

7.22 In the case of some of the core polices it will not be possible to set a specific target but it will still be possible to assess the effectiveness of these policies in relation to minerals development.

7.23 The results of monitoring against the implementation and monitoring framework will be reported in the monitoring reports.

Implementation of the waste planning strategy

7.24 The waste planning strategy seeks to ensure that sufficient waste management capacity is available throughout the period to 2031 to deliver the plan's aims and objectives. This is to be secured by:

- setting a locational strategy for the waste management provision that will be required
- safeguarding sites already in waste management use;
- allocation of sites suitable for waste management development in the Site Allocations Document;
- granting planning permission for waste development that accords with the plan's proposals and policies.

Other strategies, including the Oxfordshire Joint Municipal Waste Management Strategy, are also relevant and have informed the policies and proposals in the Core Strategy.

7.25 As waste planning authority the County Council will determine planning applications for waste development but will consult the relevant District Council (the local planning authority) to ensure decisions are in conformity with District Local Plans. The County Council will seek to work closely with local stakeholders, other statutory bodies and the waste industry, to provide appropriate advice, prior to the submission of applications. Where the District Councils deal with proposals for development which have potential implications for the management of waste, arrangements will be put in place (through the waste site safeguarding policy W11) to ensure the County Council is consulted.

7.26 To ensure that development delivers the objectives of the waste planning strategy, relevant policies and proposals will be raised in pre-application discussions and planning applications will be determined in accordance with

the plan's policies unless material circumstances determine otherwise. Appropriate planning conditions will be imposed and, where necessary, legal agreements sought to ensure adequate controls over development as necessary.

7.27 The waste planning strategy aims to enable sufficient waste facility capacity to deal with the waste that is expected to be produced in Oxfordshire, including from new developments, and some waste from outside the county. The waste facilities and infrastructure that will be needed will be delivered through investment and development by the private sector. For the principal waste streams sufficient waste management capacity is needed to deal with the waste that is expected to be produced in Oxfordshire, including from new developments, and also for some waste from outside the county. Such facilities and infrastructure is provided by the private sector. The plan's waste management targets help to identify the types of facilities required (in particular for recycling and recovery) but it is not appropriate for this plan to dictate which particular technologies should be used. Different technologies will be appropriate in different circumstances. This is largely a matter for the waste industry, as waste management technologies are likely to develop and change through the plan period.

7.28 In the case of municipal waste, any investment in facilities will be through contract or partnership arrangements between private contractors and the County or District Councils, as waste disposal and collection authorities. Implementation of the strategy will depend on proposals coming forward for sufficient facilities (particularly for composting, recycling and treatment of waste) in appropriate locations to enable waste management needs to be met. Planning applications will need to be made in time for the facilities to be available when they are required.

7.29 The provision for additional waste management capacity that needs to be made over the plan period (policy W3) will be identified, monitored and updated through the Minerals and Waste Annual Monitoring Reports. The waste planning strategy identifies the broad locations where the additional waste management facilities to meet this requirement should be located (policy W4) and sets out criteria for the siting of facilities (policy W5).

7.30 Possible sites for waste development have been put forward (nominated) by waste operators and landowners; and a number of other possible sites have been identified during preparation of the Core Strategy. These potential sites have informed the generation of the options for provision of waste facilities. These have in turn informed the spatial planning strategy that will guide the location of new facilities.

7.31 For facilities that are needed in the short term, availability of potentially suitable sites is particularly important. Preliminary work indicates that the strategy should be capable of being delivered. For longer term needs, other sites may be put forward or identified, but the number of site options that are already known indicates that needs should be capable of being met in accordance with the strategy. A preliminary assessment of sites has been

prepared to show that the waste planning strategy is potentially capable of being delivered.

7.32 In addition to the provision for additional waste facilities made in this plan, at the local community level smaller scale facilities can make an important contribution towards meeting targets for increased recycling and composting of waste. The local bottle banks and recycling bins already located in many communities provide tangible evidence of this. Opportunities may arise for further local facilities of this type to be provided and also for community composting sites, like the existing community facility at Coleshill.

7.33 Major development proposals, such as large housing schemes, may provide opportunities for waste management facilities to be provided as part of the infrastructure for the overall development. Such facilities could provide a local waste recycling site or a local source of heat and power generated from waste. This could help to deliver the provision proposed in policy W3 or could be additional provision that accords with the policies of the Plan.

7.34 Improvements to infrastructure, particularly roads and junctions, may be required in order that new or expanded waste management facilities can be developed in a way that is locally acceptable. Appropriate financial contributions for such improvements will be sought from developers and waste operators through legal agreement at the planning application stage (policy C10). Where appropriate, financial contributions may also be sought to ensure the successful achievement of biodiversity, landscape or other gains through waste management development. Provisions for obtaining developer contributions are changing with the introduction of the Community Infrastructure Levy, which will need to be taken into account in implementing the strategy.

7.35 The strategy depends on permitted permanent waste facility sites being available to operate to their full capacity throughout the plan period and not being prejudiced by other development. Existing and proposed permanent waste management sites will be safeguarded for waste use (policy W11). The District Councils should consult the County Council on applications for other development that would prevent or prejudice the use of a safeguarded site for waste management. Delivery of this part of the strategy will require liaison and co-operation between the County Council and the District Councils.

7.36 The core policies have been developed to ensure the waste strategy is delivered in an environmentally acceptable way, including by setting out criteria against which waste management site options and planning applications for waste developments will be considered. These policies will guide the identification of sites for allocation in the Site Allocations Document and will be implemented by the County Council through the development management process.

7.37 In its estimates of waste growth, the waste planning strategy takes into account the government’s aim of reducing the amount of waste produced. Other agencies and strategies are better able to lead on influencing behaviour

patterns and financial issues relating to waste generation, such as the Waste Resources Action Programme (WRAP) and European Pathway to Zero Waste. Locally, a Waste Prevention Strategy 2010-2020 was produced by the Oxfordshire Waste Partnership.

Monitoring of the waste planning strategy

7.38 The waste planning strategy is informed by the most up to date waste data available, but it must be able to respond to changing circumstances and needs. Regular monitoring is necessary, both to identify the impact of changes and to check that the strategy is achieving its objectives and identify whether there is a need to adjust the strategy in order to achieve the desired outcomes.

7.39 The Council will produce a Minerals and Waste Monitoring Report at least annually, in accordance with the Planning and Compulsory Purchase Act 2004 (as amended). These reports will include an assessment of:

- the extent to which the policies in the Minerals and Waste Local Plan are being achieved;
- any changes needed where policies are not working or objectives are not being met; and
- progress on the preparation of minerals and waste local plan documents.

Any relevant changes in government or other policy will be addressed through the monitoring reports.

7.40 The Minerals and Waste Monitoring Reports will also be used to monitor the amount of waste management capacity required and that which can be provided by existing and committed facilities, taking into account facilities that may close during the plan period (see in particular policies W1 and W3). The list of safeguarded waste sites (policy W11) will be kept up to date through the monitoring reports, which will include confirmation of the maximum capacity each facility may be able to provide.

7.41 The Council monitors the quantities of municipal waste produced and the ways in which it is managed, but is reliant on other agencies, in particular the Environment Agency, for data on other types of waste. The Council also monitors planning applications and decisions and the capacity available at waste facilities, as well as monitoring waste sites. The Council will work with the waste industry, the Environment Agency and with other waste planning authorities, including through the South East Waste Planning Advisory Group (SEWPAG), in monitoring production and movements of waste and the ways in which it is managed and in forecasting future waste production and waste management requirements.

7.42 The Environment Agency's Waste Data Interrogator, published annually, allows for monitoring of the amounts of waste coming into Oxfordshire for management or disposal; and also the amounts of waste produced in Oxfordshire that are managed or disposed elsewhere. The Council will monitor these movements annually and liaise as necessary with other Waste

Planning Authorities where waste movements exceed thresholds agreed by SEWPAG.

7.43 The Council will also make use of monitoring and survey work undertaken by and information available from other agencies, such as Defra, the Environment Agency, Natural England and English Heritage, and on other work carried out within the Council such as for transport planning and biodiversity, to monitor change.

7.44 Observations recorded in the monitoring reports will feed into reviews of the waste planning strategy. It is intended that the Core Strategy will be reviewed and rolled forward every five years. However, monitoring may indicate a need for review of part or the whole of the Core Strategy sooner. For example, if it becomes clear that the provision for additional waste facilities in the Core Strategy is insufficient, or that insufficient sites can be allocated or are coming forward as planning applications within the strategy locations identified, an earlier review of the Core Strategy may be required.

7.45 An implementation and monitoring framework for the Core Strategy waste planning strategy will be included in the Minerals and Waste Monitoring Reports. Indicators and targets will be developed to provide a consistent basis for monitoring the performance of the Core Strategy's vision, objectives and policies for waste development to 2031. The indicators will reflect the intent of the strategy objectives and the sustainability appraisal framework identified in the Sustainability Appraisal Report.

7.46 In the case of some of the core polices it will not be possible to set a specific target but it will still be possible to assess the effectiveness of these policies in relation to waste development.

7.47 The results of monitoring against the implementation and monitoring framework will be reported in the monitoring reports.

Appendix 1. Replacement of Saved Development Plan Policies

A. Policies replaced by policies in the Oxfordshire Minerals and Waste Local Plan: Part 1 – Core Strategy

Plan	Policy No.	Subject of Policy
Oxfordshire Minerals and Waste Local Plan (1996)	SD1	Sand and gravel landbanks
Oxfordshire Minerals and Waste Local Plan (1996)	SD2	Small sand and gravel extensions
Oxfordshire Minerals and Waste Local Plan (1996)	SD3	Limestone and chalk quarries
Oxfordshire Minerals and Waste Local Plan (1996)	SD4	Ironstone extraction
Oxfordshire Minerals and Waste Local Plan (1996)	SD5	Clay extraction
Oxfordshire Minerals and Waste Local Plan (1996)	SD7	Rail head sites
Oxfordshire Minerals and Waste Local Plan (1996)	SD9	Rail head safeguarding
Oxfordshire Minerals and Waste Local Plan (1996)	SD10	Mineral safeguarding
Oxfordshire Minerals and Waste Local Plan (1996)	SD11	Prior extraction
Oxfordshire Minerals and Waste Local Plan (1996)	W2	Waste from elsewhere
Oxfordshire Minerals and Waste Local Plan (1996)	W3	Recycling proposals
Oxfordshire Minerals and Waste Local Plan (1996)	W4	Recycling in the countryside
Oxfordshire Minerals and Waste Local Plan (1996)	W5	Screening waste plant etc
Oxfordshire Minerals and Waste Local Plan (1996)	W6	Langford Lane site
Oxfordshire Minerals and Waste Local Plan (1996)	W7	Landfill
Oxfordshire Minerals and Waste Local Plan (1996)	PE2	Mineral working outside identified areas
Oxfordshire Minerals and Waste Local Plan (1996)	PE3	Buffer zones
Oxfordshire Minerals and Waste Local Plan (1996)	PE4	Groundwater
Oxfordshire Minerals and Waste Local Plan (1996)	PE5	River Thames etc
Oxfordshire Minerals and Waste Local Plan (1996)	PE7	Floodplain
Oxfordshire Minerals and Waste Local Plan (1996)	PE8	Archaeological assessment

Oxfordshire Minerals and Waste Local Plan (1996)	PE9	Archaeological remains
Oxfordshire Minerals and Waste Local Plan (1996)	PE10	Woodland and forestry
Oxfordshire Minerals and Waste Local Plan (1996)	PE11	Rights of way
Oxfordshire Minerals and Waste Local Plan (1996)	PE12	Public access
Oxfordshire Minerals and Waste Local Plan (1996)	PE13	Restoration and after-use
Oxfordshire Minerals and Waste Local Plan (1996)	PE14	Nature conservation
Oxfordshire Minerals and Waste Local Plan (1996)	PE18	Determining applications
Oxfordshire Minerals and Waste Local Plan (1996)	PB1	Processing plant etc
Oxfordshire Minerals and Waste Local Plan (1996)	PB2	Removal of plant etc

B. Policies to be replaced by policies in the Oxfordshire Minerals and Waste Local Plan: Part 2 – Site Allocations Document

Plan	**Policy No.**	**Subject of Policy**
Oxfordshire Minerals and Waste Local Plan (1996)	SC3	Sutton Courtenay: traffic routeing
Oxfordshire Minerals and Waste Local Plan (1996)	SW1	Sutton Wick: area for working
Oxfordshire Minerals and Waste Local Plan (1996)	SW2	Sutton Wick: access restriction
Oxfordshire Minerals and Waste Local Plan (1996)	SW3	Sutton Wick: access requirement
Oxfordshire Minerals and Waste Local Plan (1996)	SW4	Sutton Wick: rate of production
Oxfordshire Minerals and Waste Local Plan (1996)	SW5	Sutton Wick: after-uses
Oxfordshire Minerals and Waste Local Plan (1996)	SH1	Stanton Harcourt: areas for working
Oxfordshire Minerals and Waste Local Plan (1996)	SH2	Stanton Harcourt: Sutton bypass
Oxfordshire Minerals and Waste Local Plan (1996)	SH3	Stanton Harcourt: traffic routeing
Oxfordshire Minerals and Waste Local Plan (1996)	SH4	Stanton Harcourt: traffic routeing requirements
Oxfordshire Minerals and Waste Local Plan (1996)	SH5	Stanton Harcourt: after-uses
Oxfordshire Minerals and Waste Local Plan (1996)	SH6	Stanton Harcourt: after-use management

Oxfordshire Minerals and Waste Local Plan (1996)	CY1	Cassington – Yarnton: area for working
Oxfordshire Minerals and Waste Local Plan (1996)	CY2	Cassington – Yarnton: conveyors and haul routes
Oxfordshire Minerals and Waste Local Plan (1996)	CY3	Cassington – Yarnton: after-uses
Oxfordshire Minerals and Waste Local Plan (1996)	CY4	Cassington – Yarnton: pedestrian and cycle routes

Appendix 2. Existing and Permitted Waste Management Sites Safeguarded under Policy W11

These sites are safeguarded under Policy W11 pending adoption of the Oxfordshire Minerals and Waste Local Plan: Part 2 – Site Allocations Document

CHERWELL DISTRICT				
No.	**Site and (Operator)**	**Parish**	**Grid Ref**	**Type of Facility**
009	Worton Farm (M&M Skips) (Oxford Renewable)	Yarnton	SP 471113	Recycle/Transfer Biological Treatment CDE Recycling
011	Finmere Quarry (Opes)	Finmere	SP 628322	Recycle/Transfer Residual Treatment
014	Ashgrove Farm (Agrivert)	Ardley	SP 534256	Biological Treatment
019	Bicester STW (TWA Ltd)	Bicester	SP 579210	Waste Water Treatment
022	Ardley Landfill (Viridor)	Ardley	SP 543259	Residual Treatment Recycle/Transfer (HWRC) Recycle/Transfer
023	Alkerton landfill (W&S Recycling)	Alkerton	SP 383432	Recycle/Transfer (HWRC)
030	Shipton Quarry (Earthline)	Shipton-on-Cherwell	SP 478174	CDE Recycling
070	TWA Depot (part) (Clancy Docwra)	Kidlington	SP 476153	CDE Recycling
121	Old Brickworks Farm (Miller)	Bletchingdon	SP 518158	CDE Recycling
126	Varney's Garage Panozzo/Grazzi)	Hornton	SP 380457	Metal Recycling
127	Thorpe Mead 2a/3a (Banbury Motors)	Banbury	SP 469403	Metal Recycling
133	Newlands Farm (Smiths)	Bloxham	SP 439352	CDE Recycling Metal Recycling
137	Windmill Nursery (Dulcie Hughes)	Blackthorn	SP 609207	Metal Recycling
143	Banbury Transfer Station (Grundon)	Banbury	SP 469402	Recycling/Transfer
145	Ferris Hill Farm (Matthews)	Hook Norton	SP 355351	CDE Recycling
153	Merton Street Depot (Grundon)	Banbury	SP 465402	Hazardous
173	The Tyre Yard Charlett)	Yarnton	SP 480119	Recycle/Transfer

223	Allotment Land, Overthorpe Meade (Grundon)	Banbury	SP 467403	Recycle/Transfer Hazardous
232	Banbury STW (TWA Ltd)	Banbury	SP 471402	Waste Water Treatment Biological Treatment
258	Thorpe Lane Depot (Cherwell DC)	Banbury	SP 467406	Recycling/Transfer
269	Dewars Farm (Smiths of Bletchington + Raymond Brown)	Middleton Stoney	SP 537247	Residual Treatment
OXFORD CITY				
No.	**Site and (Operator)**	**Parish**	**Grid Ref**	**Type of Facility**
150	Horspath Road Depot (Oxford City)	Oxford	SP 556046	Recycle/Transfer
156	Pony Lane (City Insulation)	Oxford	SP 557047	Hazardous
161	Redbridge HWRC (W&S Recycling)	Oxford	SP 518038	Recycle/Transfer (HWRC)
163	Cowley Marsh Depot (Oxford City)	Oxford	SP 541048	Recycle/Transfer
186	Jackdaw Lane (Metal Salvage)	Oxford	SP 524051	Metal Recycling
SOUTH OXFORDSHIRE DISTRICT				
No.	**Site and (Operator)**	**Parish**	**Grid Ref**	**Type of Facility**
005	Playhatch Quarry (Grabloader)	Eye & Dunsden	SU 740765	CDE Recycling
013	Ewelme No.2 (Grundon)	Ewelme	SP 646905	Recycle/Transfer CDE Recycling Hazardous
017	Battle Farm (Agrivert)	Crowmarsh	SU 622905	Biological Treatment
024	Oakley Wood (W&S Recycling)	Nuffield	SU 640890	Recycle/Transfer (HWRC)
128	Berinsfield Car Breakers (Auto Storage)	Berinsfield	SU 570958	Metal Recycling
129	Milton Pools (R L Mead)	Gt. Haseley	SP 654032	Metal Recycling
138	Woodside (Mains Motors)	Ewelme	SU 649893	Metal Recycling

146	Oxford STW (TWA Ltd)	Sandford	SP 544019	Waste Water Treatment
152	Ewelme No.1 (Grundon)	Ewelme	SU 646902	Hazardous
182	The Tyre Depot (Philips Tyres)	Elsfield	SP 527092	Recycle/Transfer
184	Rumbolds Pit (R Hazell)	Ewelme	SU 645927	CDE Recycling
205	Greenwoods (Yassine Saleh)	Garsington	SP 576018	Metal Recycling
216	Culham No.1 (Verdant)	Culham	SU 531953	Recycle/Transfer
234	Didcot STW (TWA Ltd)	Didcot	SU 520913	Waste Water Treatment
239	Menlo Industrial Park (ASM Ltd)	Thame	SP 691054	Metal Recycling
242	Culham JET (CCFE)	Culham	SU 536958	Radioactive
252	Upper Farm (Midland Pig)	Warborough	SU 596943	Biological Treatment
256	Hundridge Farm (Onsyany Skips_	Ipsden	SU 669854	CDE Recycling
272	Fords Yard (McGhee)	Waterperry	SP 613098	Metal Recycling
273	The Metal Yard (Rogers)	Nuneham Courtenay	SU 553993	Metal Recycling
VALE OF WHITE HORSE DISTRICT				
No.	**Site and (Operator)**	**Parish**	**Grid Ref**	**Type of Facility**
002	Prospect Farm (Raymond Brown)	Chilton	SU 498851	Recycle/Transfer
				CDE Recycling
010	Sutton Courtenay Landfill (FCC + Hanson)	Sutton Courtenay	SU 515930	Recycle/Transfer
				Transfer (residual waste)
				Biological Treatment
				CDE Recycling
016	Glebe Farm (Agrivert)	Hinton Waldrist	SU 366972	Biological Treatment
053	B462 complex (Magnox)	Harwell	SU 474866	Radioactive
				Groundwater Treatment
059	Sutton Wick Lane (Abingdon Car Breakers)	Drayton	SP 492946	Metal Recycling
061	Wantage STW (TWA Ltd)	Grove	SU 403915	Waste Water Treatment
114	Appleford Sidings	Sutton	SU 520931	CDE Recycling

	(Hanson)	Courtenay		
118	Tubney Wood (Hills)	Tubney	SP 449006	CDE Recycling
124	Church Lane (National Trust)	Coleshill	SU 234938	Biological Treatment
132	Whitecross Metals (Alumni Holdings)	Wootton	SP 483004	Metal Recycling
134	Quelches Orchard (W Brakspeare)	Wantage	SU 411887	Metal Recycling
135	Roadside Farm Haynes)	E. Challow	SU 378886	Metal Recycling
141	Grove Industrial Park (Aasvogel)	Grove	SU 385895	Recycle/Transfer CDE Recycling
144	Hill Farm (J James Ltd)	Appleford	SO 523922	Recycle/Transfer
151	Highway Depot (OCC)	Drayton	SU 489940	Hazardous
159	Drayton HWRC (W&S Recycling)	Drayton	SU 475933	Recycle/Transfer (HWRC)
160	Stanford-in-Vale HWRC (W&S Recycling)	Stanford-in-Vale	SU 330939	Recycle/Transfer (HWRC)
229	Shellingford Quarry (Eathline)	Shellingford	SU 328937	CDE Recycling
247	Upwood Park (Hills)	Tubney	SP 452003	CDE Recycling
251	Milton Park (part) (Oxford Wood)	Milton	SU 487918	Recycle/Transfer
255	Didcot Power Station (RWE Npower)	Milton	SU 508918	Recycle/Transfer
263	Swannybrook Farm (NAP Grab Hire)	Kingston Bagpuize	SU 407967	CDE Recycling
267	Oxford Road Depot (Vale Housing)	E. Hanney	SU 421932	Hazardous
WEST OXFORDSHIRE DISTRICT				
No.	**Site and (Operator)**	**Parish**	**Grid Ref**	**Type of Facility**
001	Shipton Hill (Hickman Bros)	Fulbrook	SP 267138	CDE Recycling
003	Dix Pit (FCC)	Stanton Harcourt	SP 410045	Recycle/Transfer (HWRC) Transfer (residual waste)
004	Slape Hill Quarry (Sheehan)	Glympton	SP 423196	Recycle/Transfer
008	New Wintles Farm (McKenna)	Eynsham	SP 431108	CDE Recycling

015	Showell Farm (Agrivert)	Chipping Norton	SP 356296	Biological Treatment
028	Gill Mill Quarry (Smiths of Bletchington)	Ducklington	SP 370078	CDE Recycling
067	Old Railway Halt (J Aldridge)	Gt. Rollright	SP 327303	Metal Recycling
103	Lakeside Industrial Park (part) (Ethos Recycling)	Standlake	SP 383044	CDE Recycling
116	Worsham Quarry (Fraser Evans)	Minster Lovell	SP 296103	Recycle/Transfer
130	South Estate (D) (Claridge Motors)	Carterton	SP 279060	Metal Recycling
131	62/64 West End (T&B Motors)	Witney	SP 358106	Metal Recycling
139	Sturt Farm (2a/4) (College Motors)	Shilton	SP 275105	Metal Recycling
142	Sandfields Farm (K J Millard)	Over Norton	SP 447240	Recycle/Transfer CDE Recycling
149	Brize Norton X-fer (Ebsworth)	Minster Lovell	SP 313098	Recycle/Transfer
157	Lower Yard (Unit 8) (Amity Insulation)	Eynsham	SP 431086	Hazardous
180	Elmwood Farm (Cotswold Wood)	Black Bourton	SP 283051	Recycle/Transfer
204	Downs Road (old FloGas site) (May Gurney)	Witney	SP 329103	Recycle/Transfer
214	Manor Farm (K W C Amor)	Kelmscott	SU 251990	Recycle/Transfer
228	Units 1/2, Enstone Airfield (Viridor)	Enstone	SP 397256	Recycle/Transfer
231	Lakeside (Plot J) (Adler & Allen)	Standlake	SP 384044	Hazardous
233	Witney STW (TWA Ltd)	Ducklington	SP 348084	Waste Water Treatment
236	Dix Pit Complex (Sheehan)	Stanton Harcourt	SP 403050	CDE Recycling
241	Lakeside Industrial Park (part) (Micks Skips)	Standlake	SP 384044	Recycle/Transfer CDE Recycling
257	(Adjoining) Cemex Batching Plant (Fergal)	Hardwick	SP 387057	CDE Recycling
259	Riding Lane Scrap Yard (Smith Bros)	Crawley	SP 330137	Metal Recycling

260	Burford Quarry (Pavestone UK)	Burford	SP 269107	CDE Recycling

Appendix 3. Flood Vulnerability Classification and Flood Zone Compatibility

This appendix section requires checking for any further factual updating

Table A1: Minerals and Waste Flood Vulnerability Classification

Development Type	Vulnerability Classification	Flood Zone Compatibility
Mineral or waste development requiring hazardous substances consent	Highly Vulnerable	Flood Zone 1 and 2
Landfill sites*	More Vulnerable	Flood Zone 1 and 2
Waste management facilities handling hazardous waste	More Vulnerable	Flood Zone 1 and 2
Minerals working and processing (except for sand and gravel working)	Less Vulnerable	Flood Zones 1, 2 and 3a
Sand and Gravel Workings	Water Compatible	Flood Zone 1, 2, 3a, 3b
Sand and Gravel processing sites (including grading and washing plant)	Less Vulnerable	Flood Zone 1, 2, and 3a
Sewage Treatment Plants	Less Vulnerable	Flood Zones 1, 2 and 3a
Waste recycling, composting and transfer uses (including recycling to produce recycled aggregate)	Less Vulnerable	Flood Zones 1, 2 and 3a
Secondary aggregate re-cycling (considered as minerals processing)	Less Vulnerable	Flood Zones 1, 2 and 3a
Waste treatment processes (including anaerobic digestion, mechanical biological treatment, incineration, gasification and pyrolysis).	Less Vulnerable	Flood Zones 1, 2, and 3a
Concrete block manufacture (considered as minerals processing)	Less Vulnerable	Flood Zones 1, 2 and 3a
Concrete batching plant (considered as minerals processing)	Less Vulnerable	Flood Zones 1, 2 and 3a

This table is developed from Tables 2 and 3 in National Planning Practice Guidance, Flood Risk and Coastal Change, Flood Zone and Flood Risk Tables, March 2014.
Waste management categories are based on guidance in National Planning Practice Guidance, Waste, October 2014.
* Inert waste imported for the restoration of sand and gravel workings not included where imported as part of a recovery operation (an increase in flood storage capacity is likely in these circumstances)

Table A2. PPS25 Flood Risk Vulnerability and Flood Zone Compatibility
(Developed from Tables 2 and 3 in National Planning Practice Guidance, Flood Risk and Coastal Change, Flood Zone and Flood Risk Tables, March 2014)

Minerals & Waste Development Type	Use Category	FLOOD ZONE			
		1	2	3a	3b
Any mineral or waste proposal which also requires hazardous substances consent	Highly Vulnerable	✓	Use only appropriate if Sequential Test is passed ⇩ Use only appropriate if the Exception Test is passed ⇩ ✓	× Use should not be permitted	× Use should not be permitted
Landfill sites or sites used for waste management facilities for hazardous waste	More Vulnerable	✓	Use only appropriate if Sequential Test is passed ⇩ ✓	Use only appropriate if Sequential Test is passed ⇩ Use only appropriate if the Exception Test is passed ⇩ ✓	× Use should not be permitted
Waste management facilities (except landfill and hazardous waste), Minerals working and processing (except for sand and gravel workings)	Less Vulnerable	✓	Use only appropriate if Sequential Test is passed ⇩ ✓	Use only appropriate if Sequential Test is passed ⇩ ✓	× Use should not be permitted
Sand and gravel workings (that exclude processing operations)	Water Compatible	✓	Sequential Test suggested as means of prioritising sites at allocation stage ✓	Sequential Test suggested as means of prioritising sites at allocation stage ✓	Sequential Test suggested as means of prioritising sites at allocation stage ✓

×*: Use should not be permitted* ⇩**:** *If passed proceed* ✓*: Appropriate use*

Glossary

The glossary requires further editing and factual updating

Aggregates – sand, gravel and crushed rock that is used in the construction industry to make things like concrete, mortar, asphalt and drainage material. For secondary or recycled aggregates, see below.

Agricultural waste – waste from a farm or market garden including pesticide containers, tyres and old machinery.

Aftercare – The management and treatment of land for a set period of time immediately following the completed restoration of a mineral working to ensure the land is returned to the required environmental standard.

After-use – The long term use that land formerly used for mineral workings is restored to, e.g. agriculture, forestry, nature conservation, recreation or public amenity such as country parks.

Anaerobic Digestion Facility – facility involving process where biodegradable material is encouraged to break down in the absence of oxygen, which changes the nature and volume of material and produces a gas which can be burnt to recover energy and digestate which may be suitable for use as a soil conditioner.

Ancient Woodland – woodland that has existed continuously since or pre -dates 1600. Before this date planting of new woodland was uncommon, so a wood present in 1600 was likely to have developed naturally. The ancient woodland inventory is a data source held and maintained by the Woodland Trust on the location and extent of ancient woodlands.

Annual Monitoring Report (AMR) – see Monitoring Report.

Apportionment – the allocation between minerals and waste authorities of an overall total amount of provision required for mineral production or waste management, for a particular period of time, e.g. as set out in the South East Plan.

Area of Outstanding Natural Beauty (AONB) – area with statutory national landscape designation, the primary purpose of which is to conserve and enhance natural beauty.

Biodegradable waste – materials that can be broken down by naturally-occurring micro-organisms, e.g. food, garden waste and paper.

Biodiversity Action Plan (BAP) – strategy prepared by the local planning authority together with nature conservation organisations aimed at protecting and enhancing the biological diversity.

Biological Diversity / Biodiversity – the variety of life including plants, animals and micro-organisms, ecosystems and ecological processes.

Buffer zones – areas drawn around settlements or properties in which mineral development is prohibited. The purpose of these zones is to protect settlements from disruption caused by the working of minerals. They can also be used to prevent sterilisation of minerals resources by the encroachment of other developments.

Climate change – long-term changes in temperature, precipitation, wind and all other aspects of the earth's climate.

Commercial and Industrial waste – waste from factories or premises used for the purpose of trade or business, sport, recreation or entertainment.

Composting – the breakdown of organic matter aerobically (in presence of oxygen) into a stable material that can be used as a fertiliser or soil conditioner.

Conservation Target Areas (CTAs) – important areas for wildlife in Oxfordshire, where the main aim is to restore biodiversity at a landscape-scale through the maintenance, restoration and creation of Biodiversity Action Plan priority habitats.

Construction, Demolition and Excavation waste – waste arising from the building process comprising demolition and site clearance waste and builders' waste from the construction/demolition of buildings and infrastructure. Includes masonry, rubble and timber.

Core Strategy – sets out the long-term spatial vision for a local planning authority area and the strategic policies and proposals to deliver that vision.

Crushed rock – naturally occurring rock which is crushed into a series of required sizes to produce an aggregate.

Designated Heritage Asset – a World Heritage Site, Scheduled Monument, Listed Building, Registered Park and Garden, Registered Battlefield or Conservation Area designated as such under the relevant legislation.

Development Plan Documents (DPDs) – spatial planning documents that form part of a Local Plan or a Minerals and/or Waste Plan and are subject to independent examination. They have 'development plan' status. They can include Core Strategy and Site Allocations DPDs.

Energy from Waste (EfW) Facility/Plant – residual waste treatment facility where energy (heat and/or electricity) is recovered from waste; either from direct combustion of waste under controlled conditions at high temperatures; or from combustion of by-products derived from the waste treatment process such as biogas or refuse-derived fuel.

Energy Recovery – covers a number of established and emerging technologies, though most energy recovery is through incineration technologies. Many wastes are combustible, with relatively high calorific values – this energy can be recovered through processes such as incineration with electricity generation, gasification or pyrolysis.

Environment Agency (EA) – Government advisor and agency with statutory responsibilities to protect and improve the environment (including air, land and water).

Extension to quarry – extraction of minerals on land which is contiguous or non-contiguous with an existing quarry, where extracted material is moved to the existing quarry processing plant and access via means other than the highway (e.g. by conveyor or internal haul-road).

Gasification – A technology related to incineration where waste is heated in the presence of air to produce fuel rich gases.

Greenfield site – site previously unaffected by built development.

Greenhouse gases – gases such as methane and carbon dioxide that contribute to climate change.

Green Infrastructure – a network of strategically planned and managed natural and working landscapes and other open spaces that conserve ecosystem values and functions and provide associated benefits to human populations.

Groundwater – water held in water-bearing rocks, in pores and fissures underground.

Habitats Regulations Assessment (HRA) – an assessment of the likely impacts of the possible effects of a plan's policies on the integrity of European sites (including Special Areas of Conservation and Special Protection Areas), including possible effects 'in combination' with other plans, projects and programmes.

Hazardous waste – waste that may be hazardous to humans and that requires specific and separate provision for dealing with it. Categories are defined by regulations. Includes many "everyday" items such as electrical goods. Previously referred to as Special Waste.

Household Waste Recycling Centres (HWRCs) – place provided by the Waste Disposal Authority where members of the public can deliver household wastes for recycling or disposal (also known as Civic Amenity Sites).

Heritage Asset – A building, monument, site, place area or landscape positively identified as having a degree of significance meriting consideration in planning decisions. Heritage assets are the valued components of the historic environment. They include assets identified by the local planning authority during the process of decision-making or the plan-making process (including local listing).

Household Waste – waste from household collection rounds, street sweeping, litter collection, bulky waste collection, household waste recycling centres and bring or drop-off recycling schemes.

Incineration – burning of waste at high temperatures under controlled conditions. This results in a reduction in bulk and may involve energy reclamation. Produces a

burnt residue or 'bottom ash' whilst the chemical treatment of emissions from the burning of the waste produces smaller amounts of 'fly ash'.

Independent Examination – process whereby an independent Planning Inspector publicly examines a Development Plan Document for its soundness before issuing their report and recommendations to the planning authority.

Inert waste – waste that does not normally undergo any significant physical, chemical or biological change when deposited at a landfill site. It may include materials such as rock, concrete, brick, sand, soil or certain arisings from road building or maintenance. Most of the category “construction, demolition and excavation” waste is inert waste.

Industrial waste – wastes from any factory, transportation apparatus, scientific research, dredging, sewage and scrap metal.

Intermediate Level Waste (ILW) – radioactive wastes which exceed the upper activity boundaries for Low Level Waste but which do not need heat to be taken into account in the design of storage or disposal facilities.

In-Vessel Composting Facility – facility where the composting process takes place inside a vessel where conditions are controlled and optimised for the aerobic breakdown of materials.

Landbank – the reserve of unworked minerals for which planning permission has been granted, including non-working sites, expressed in tonnage or years.

Landfill – permanent disposal of waste into the ground by the filling of voids or by landraising.

Landfill Allowance Trading Scheme (LATS) – a government scheme to reduce the amount of biodegradable municipal waste sent to landfill, under which Waste Disposal Authorities are allocated annual allowances for the amounts of biodegradable municipal waste that may be landfilled; the allowances are tradeable between authorities.

Landfill gas – gas generated by the breakdown of biodegradable waste within landfill sites, consisting mainly of methane and carbon dioxide.

Landfill tax – Government tax on waste disposed of at landfill sites. Aims to encourage more sustainable waste management methods.

Landraise or **Landraising** – permanent disposal of waste material above ground, resulting in the raising of the ground level.

Landscape character – a distinct, recognisable and consistent pattern of elements, be it natural (e.g. soil and landform) and/or human (e.g. settlement and

development) in the landscape that makes one landscape different from another, rather than better or worse[117].

Local Development Framework (LDF) – folder of local development documents prepared planning authorities, that sets out the spatial planning strategy for the area.

Local Development Scheme – the programme for the preparation of local development documents.

Local Nature Reserve – an area of particular wildlife interest declared by a local authority under Section 21 of the National Parks and Access to the Countryside Act 1949; usually managed by the local authority.

Local Plan – part of the statutory development plan that sets out policies on land use and development, prepared by planning authorities.

Local Wildlife Site –

Low Level Waste (LLW) – radioactive waste having a radioactive content not exceeding four gigabecquerels per tonne (GBq/te) of alpha or 12 GBq/te of beta/gamma radioactivity, but not including radioactive materials that are acceptable for disposal with municipal and general commercial or industrial waste; includes soil, building rubble, metals and organic materials arising from both nuclear and non-nuclear sources; metals are mostly in the form of redundant equipment; organic materials are mainly in the form of paper towels, clothing and laboratory equipment that have been used in areas where radioactive materials are used, such as hospitals, research establishments and industry.

Marine aggregates – aggregates sourced by dredging from the sea bed.

Marine-borne material – sand and gravel that is taken from the sea bed and imported to land.

Materials Recovery/Recycling Facility (MRF) – facility where recyclable materials are sorted and separated from other wastes before being sent for reprocessing.

Mechanical and Biological Treatment (MBT) – residual waste treatment process involving the mechanical separation of recyclable materials followed by composting of the remaining material to produce a fuel or stabilised waste for landfilling.

Mineral Consultation Areas – areas of potential mineral resource wherein district planning authorities should consult the County Council on applications for development, to prevent mineral resources being lost ('sterilised').

Mineral reserves – Mineral deposits which have been investigated and are proven to be of economic importance due to the quality, quantity and nature of the deposit. Permitted reserves also have planning permission for extraction.

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[117] Natural England definition; http://www.naturalengland.org.uk/ourwork/landscape/englands/character/default.aspx

Mineral resource – A potential source of a mineral without permission for extraction, where the deposit's nature, quality and quantity may not yet have been assessed.

Mineral Safeguarding Areas – areas of known mineral resource that are considered to be of sufficient economic or conservation value (such as building stones) to warrant protection for generations to come.

Mineral Local Plan – part of the statutory development plan that sets out the land use policies for minerals for the plan area, prepared by a minerals planning authority (unitary or county council).

Minerals Planning Authority – the planning authority responsible for planning control of minerals development.

Minerals and Waste Development Framework (MWDF) – folder of local development documents prepared by minerals and waste planning authorities that sets out the spatial planning strategy for minerals and waste planning for the area.

Mitigation measures – actions to prevent, avoid, or minimise the actual or potential adverse effects of a development, action, project, plan, or policy.

Monitoring Report – assesses the implementation of the Local Development Scheme and the extent to which policies in Local Development Documents are being achieved.

Municipal waste/Municipal solid waste (MSW) – waste that is collected by a waste collection authority. Mostly consists of household waste, but can also include waste from municipal parks and gardens, beach cleansing, waste resulting from clearance of fly-tipped materials and some commercial waste.

National Planning Policy Framework – Planning policy document (March 2012) for England issued by central Government which supersedes the majority of Planning Policy Statements, Planning Policy Guidance Notes, Minerals Policy Statements and Minerals Planning Guidance notes. Does not replace PPS 10.

National Nature Reserve – nationally important area of special nature conservation interest, designated by Natural England under Section 16 of the National Parks and Access to the Countryside Act 1949.

Natural England – the Government's advisor on the natural environment.

Non-Hazardous Waste – waste, which is neither inert nor hazardous, which is permitted to be disposed at a non-hazardous landfill; also referred to as non-inert waste.

Non-inert waste – waste that is potentially biodegradable or may undergo significant physical, chemical or biological change when deposited at a landfill site. Also referred to as "non-hazardous waste".

Notable species –

Nuclear Decommissioning Authority (NDA) – a non-departmental public body with responsibility to deliver the decommissioning and clean-up of the UK's civil nuclear legacy.

Permitted reserves – mineral reserves with planning permission for extraction.

Planning Policy Guidance (PPG) – documents issued by Central Government setting out its national land use policies and guidance for England on different areas of planning. These were gradually being replaced by Planning Policy Statements.

Planning Policy Statements (PPS) – documents issued by Central Government to replace the existing Planning Policy Guidance in order to provide clearer and more focused polices for England on different areas of planning (with the removal of advice on practical implementation, which is better expressed as guidance rather than policy). Most were replaced by the National Planning Policy Framework (NPPF) in March 2012.

Planning permission – formal consent given by the planning authority to develop or use land.

Primary aggregates – naturally-occurring mineral deposits that are used for the first time as an aggregate.

Priority habitat –

Priority species –

Protected species –

Pyrolysis – a technology related to incineration where waste is heated in the absence of air to produce gas and liquid fuel plus solid waste.

Recycled aggregates – derived from reprocessing waste arising from construction and demolition activities (e.g. concrete, bricks and tiles), highway maintenance (e.g. asphalt planings), excavation and utility operations. Examples include recycled concrete from construction and demolition waste material, spent rail ballast and recycled asphalt.

Recycling – the recovery of waste materials for use as or conversion into other products (including composting but excluding energy recovery).

Recovery – obtaining value from waste through one of the following means:

- Recycling;
- Composting;
- Other forms of material recovery (such as anaerobic digestion);
- Energy recovery (combustion with direct or indirect use of the energy produced, manufacture of refuse derived fuel, gasification, pyrolysis or other technologies).

Residual waste – the waste remaining after materials have been recovered from a waste stream by re-use, recycling, composting or some other material recovery process (such as anaerobic digestion).

Residual Waste Treatment Facility – facility for processing waste which has not been re-used, recycled or composted in order to recover resources and minimise the amount of waste that needs to be disposed by landfill; the two most common forms of residual waste treatment are energy from waste and mechanical and biological treatment.

Resource Park – a site comprising a number of different waste recovery, treatment and reprocessing facilities which enables synergy between those facilities to be realised through common location.

Restoration – methods by which the land is returned to a condition suitable for an agreed after-use following the completion of minerals or waste operations.

Re-use – the repeat utilisation of an item/material for its original (or other) purpose.

Screening report – in Habitats Regulations Assessment, the first stage of the assessment process to determine whether there will be possible effects of a plan's policies on the integrity of European sites.

Secondary Aggregates – usually the by-products of other industrial processes, e.g. blast furnace slag, steel slag, pulverised-fuel ash (PFA), incinerator bottom ash, furnace bottom ash, recycled glass, slate waste, china clay sand and colliery spoil.

Sensitive Receptor – the aspects of the environment likely to be significantly affected by the development, including in particular population, fauna, flora, soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the inter-relationship between these factors[118].

Sewage Sludge or **Sludge** – the semi-solid or liquid residue removed during the treatment of wastewater.

Site of Local Importance for Nature Conservation –

Site of Special Scientific Interest – site notified by Natural England under Section 25 of the Wildlife and Countryside Act 1981 as having special wildlife or geological features worthy of protection.

Sludge Treatment Centre – facility at a sewage treatment plant where sludge removed from waste water (sewage) is subject to a treatment process to enable it to be recovered and/or disposed.

[118] Definition in EIA regulations

Soundness – in accordance with national planning policy, local development documents must be 'soundly' based in terms of their content and the process by which they were produced. They must also be based upon a robust, credible evidence base. There are four tests of soundness in the National Planning Policy Framework.

South East Aggregates Working Party (SEEAWP) – a non-executive technical group covering the South East of England with the role of advising government (the Department for Communities and Local Government), Mineral Planning Authorities and industry on aggregates, including helping mineral planning authorities fulfil the duty to cooperate on strategic mineral planning issues, comprising officers of the mineral planning authorities, representatives of the minerals industry and government representatives .

South East Waste Planning Advisory Group (SEWPAG) – a non-executive technical group comprising the waste planning authorities of South East England and representatives of the Environment Agency, the waste industry and the environmental sector which provides advice to help waste planning authorities fulfil the duty to cooperate on strategic waste planning issues.

South East Plan – the Regional Spatial Strategy for the South East region, prepared by the former South East England Regional Assembly and approved by the Secretary of State in May 2009.

Special Area of Conservation – site of international importance for nature conservation, designated under the EU Habitats Directive.

Special Protection Area (SPA) – designation of international importance for nature conservation made under the EU Birds Directive to conserve the best examples of the habitats of certain threatened species of birds.

Statement of Community Involvement – document which outlines the standards and approach that the County Council will undertake in engaging stakeholders and the local community in producing minerals and waste plans and in considering planning applications.

Statutory consultee – Organisations with which the local planning authority must, by regulation, consult on the preparation of its land use plan or in determining a planning application. For land use plans, this always includes the Environment Agency, Natural England and English Heritage.

Sterilisation – this occurs when developments such as housing, roads or industrial parks are built over mineral resources, preventing their possible future extraction.

Strategic Environmental Assessment (SEA) – an environmental assessment of certain plans and programmes, including those in the field of planning and land use, which complies with the EU Directive 2001/42/EC; it involves the preparation of an environmental report, carrying out of consultation, taking into account of the environmental report and the results of the consultation in decision making, provision

of information when the plan or programme is adopted and showing that the results of the environment assessment have been taken into account.

Structure Plan – framework of strategic planning policies, produced by the County Council. The Oxfordshire Structure Plan was largely replaced as a statutory planning document by the South East Plan in May 2009.

Sustainable Development / Sustainability – development that meets the needs of the present without comprising the ability of the future generations to meet their own needs, by taking into consideration long-term social, economic and environmental impacts.

Sustainable Community Strategy – statutory strategy for promoting the economic, social and environmental well-being of the area. Prepared through partnership working between statutory sector providers, the community and voluntary sector, businesses, residents and the local authorities.

Sustainability Appraisal – an appraisal of the economic, environmental, and social effects of a plan from the outset of the preparation process to allow decisions to be made that accord with the principles of sustainable development and to check policies against sustainability objectives. The scoping report of a sustainability appraisal seeks the agreement of statutory consultees and the competent authority on the intended range of issues to be covered in the assessment. The Planning and Compulsory Purchase Act 2004 requires a sustainability appraisal to be undertaken of all development plan documents.

Thermal Treatment – generic term encompassing incineration, gasification and pyrolysis.

Transport Assessment –

Transport Statement –

Transfer Station – a bulk collection point for waste prior to its onward transport to another facility for treatment or disposal.

Very Low Level Waste (VLLW) – radioactive waste with very low concentrations of radioactivity, arising from both nuclear and non-nuclear sources, which because it contains little total radioactivity can be safely treated by various means, including disposal with municipal and general commercial and industrial waste at landfill sites. Formal definition:
(a) **in the case of low volumes ('dustbin loads') of VLLW** "Radioactive waste which can be safely disposed of to an unspecified destination with municipal, commercial or industrial waste ("dustbin" disposal), each 0.1m³ of waste containing less than 400 kilobecquerels (kBq) of total activity or single items containing less than 40 kBq of total activity. For wastes containing carbon-14 or hydrogen-3 (tritium):

- in each 0.1m³, the activity limit is 4,000 kBq for carbon-14 and hydrogen-3 (tritium) taken together; and
- for any single item, the activity limit is 400 kBq for carbon-14 and hydrogen-3 (tritium) taken together.

Controls on disposal of this material, after removal from the premises where the wastes arose, are not necessary."
(b) **in the case of high volumes of VLLW** "Radioactive waste with maximum concentrations of four megabecquerels per tonne (MBq/te) of total activity which can be disposed of to specified landfill sites. For waste containing hydrogen-3 (tritium), the concentration limit for tritium is 40MBq/te. Controls on disposal of this material, after removal from the premises where the wastes arose, will be necessary in a manner specified by the environmental regulators".

Voidspace –- volume within landfill (including landraising) sites that is permitted and/or available to receive waste.

Waste Collection Authority – local authority that has a duty to collect household waste, usually district or unitary authorities.

Waste Disposal Authority – local authority responsible for managing the waste collected by the collection authorities, and the provision of household waste recycling centres, usually county or unitary councils.

Waste Planning Authority – local planning authority responsible for planning control of waste management and disposal, usually county or unitary councils.

Waste Local Plan – part of the statutory development plan that sets out the land-use policies for waste for the plan area, prepared by a waste planning authority (unitary or county council).

Waste water – the water and solids from a community that flow to a sewage treatment plant operated by a water company.

Waste and Resources Action Programme (WRAP) – a government body which helps to develop markets for material resources that would otherwise have become waste, provides advisory services and helps influence public behaviour through national level communication programmes.

Abbreviations

AMR	Annual Monitoring Report
AD	Anaerobic Digestion
AONB	Area of Outstanding Natural Beauty
BAP	Biodiversity Action Plan
CDE	Construction, demolition and excavation waste
C&I	Commercial and industrial waste
CTA	Conservation Target Area
DPD	Development Plan Document
EA	Environment Agency
EfW	Energy from Waste facility
EIA	Environmental Impact Assessment
HRA	Habitats Regulations Assessment
HWRC	Household Waste Recycling Centre

ILW	Intermediate Level Waste
IVC	In-vessel composting facility
LATS	Landfill Allowance Trading Scheme
LDF	Local Development Framework
LLW	Low level waste
LNR	Local Nature Reserve
LTP	Local Transport Plan
MBT	Mechanical and Biological Treatment
MPA	Minerals Planning Authority
MPS	Minerals Policy Statement
MRF	Materials Recycling/Recovery Facility
MSW	Municipal Solid Waste
MWDF	Minerals and Waste Development Framework
NDA	Nuclear Decommissioning Authority
NHW	Non Hazardous Waste
PPG	Planning Policy Guidance
PPS	Planning Policy Statement
RSS	Regional Spatial Strategy
SA	Sustainability Appraisal
SAC	Special Area of Conservation
SEA	Strategic Environmental Assessment
SEEAWP	South East Aggregates Working Party
SEWPAG	South East Waste Planning Advisory Group
SSSI	Site of Special Scientific Interest
SPA	Special Protection Area
SPD	Supplementary Planning Document
VLLW	Very low level waste
WCA	Waste Collection Authority
WDA	Waste Disposal Authority
WPA	Waste Planning Authority
WRAP	Waste and Resources Action Programme